

BULK WATER // CC / CUCK

GAWB SUBMISSON 2026-30 Period

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Executive Summary

This document presents Gladstone Area Water Board's submission to the Queensland Competition Authority as part of its Price Monitoring Investigation for the period 1 July 2025 to 30 June 2030.

Gladstone is a strategic economic hub for Queensland, being home to some of the state's largest minerals processing, energy production, manufacturing and agricultural industries. Water is an essential input to the production processes of these industries. The Gladstone Area Water Board (GAWB) plays a key role in supporting the economy by providing raw (high reliability, 24/7 continuous flow) and treated water to industries located in Gladstone and surrounding communities, as well as the Gladstone Regional Council. It is the criticality of continuous high reliability access to water that drives the way in which GAWB operates the water delivery network and seeks to ensure continuous supply, under either a drought or growth scenario.

In 2023 the Queensland Government approved construction of the Fitzroy to Gladstone Pipeline (FGP) which will provide an improved level of water security to the region. This 117 km pipeline will have the capacity to transport 30 gigalitres per annum of water from the Fitzroy River to Gladstone. GAWB is responsible for the construction, ownership, maintenance and operation of the FGP, which is expected to be operational in 2026.

Under a Referral and Directions Notice (Referral Notice) issued by the Queensland Treasurer and Minister for Trade and Investment, the Queensland Competition Authority (QCA) has been directed to undertake a Price Monitoring Investigation of GAWB's monopoly business activities for the period from 1 July 2025 to 30 June 2030 (2025 Price Monitoring Investigation). The scope of the 2025 Price Monitoring Investigation has been limited to GAWB's existing business activities, with the recovery of costs associated with the construction and operation of the FGP to be addressed in the future, via a separate QCA review process. These costs have therefore been excluded from all forecasts detailed in this submission, and hence prices.

In accordance with the terms of the Referral Notice, this submission sets out the prices that GAWB will need to charge to fully recover its efficient costs over the five years of the FY2026-30 regulatory period, excluding the FGP.

Business Environment

The nature, scale and scope of the opportunities and challenges facing GAWB in the FY2026-30 regulatory period are transformational.

GAWB approaches the next regulatory period as the region embarks on a further major growth phase. Drivers of this growth include the decarbonisation of Australian industry and the emergence of Gladstone as a major strategic hydrogen hub and international industrial centre. This has seen GAWB receiving enquiries from a number of new customers who need water to supply their projects.

The lead times involved in such developments mean that GAWB and other essential infrastructure providers must contemplate undertaking investments in an appropriate timeframe to support emergent demand.

Further, the environment that has emerged in the current regulatory period is quite different to the one envisaged at the start of the period in 2020. In recent years, many unexpected exogenous factors have impacted project delivery timeframes, along with capital and operating costs. These challenges are expected to continue through the FY2026-30 regulatory period. This is partly fuelled by the scale and scope of forecast construction activity in the region, and at a broader state and national level.

Demand

For the first time in its history, demand for water is expected to exceed GAWB's existing annual allocation from Awoonga Dam, due to the increased level of interest from the hydrogen and renewable energy sector. For the FY2026-30 regulatory period, the demand forecast is based on GAWB's current understanding of reservation amounts for existing, new and potential customers under its water supply application and contracting frameworks.

GAWB will continue to meet with each of its customers over the coming months to discuss their future demand requirements, having regard to their contractual commitments and operational plans. This will be used to update the reservations used to set final prices from 1 July 2025.

Operating Expenditure

GAWB's operating expenditure forecast for the FY2026-30 regulatory period has been developed using the base-step-trend approach. The foundation for this forecast (i.e. the base year) is 2022-23 (as the most recently completed financial year of expenditure). GAWB's actual expenditure in that year is below the allowance found to be prudent and efficient by the QCA in the 2020 Price Monitoring Investigation.

GAWB is forecasting a material increase in its operating expenditure for the FY2026-30 regulatory period. This reflects significant cost pressures across the business as well as the expansion in the scale and scope of GAWB's activities to continue to meet the needs of its current and future customers. These increases are already being experienced in 2023-24 and (forecast) 2024-25, with GAWB bearing the increase above the forecast used to set prices in the current regulatory period.

The total forecast operating expenditure for the FY2026-30 regulatory period is \$244.72 million. This will position GAWB to respond to, and manage, the opportunities and challenges ahead as it supports current and future growth in the Gladstone region. GAWB will need to continue to actively manage and monitor risks impacting its operating expenditure (such as further increases in electricity prices) while seeking to drive efficiencies where possible.

Capital Expenditure

The amount of project costs GAWB expects to capitalise for the FY2021-25 regulatory period is below the forecast submitted to the QCA for the 2020 Price Monitoring Investigation. This reflects the challenging business and operating environment outlined above. The impact of domestic and global supply chain constraints on the availability and cost of resources, including labour and materials, has had a significant impact on GAWB's capital program.

The most material contributor to the lower than forecast capitalisation amount over the FY2021-25 regulatory period is due to the deferral of the Awoonga Dam Improvement Project. This deferral is due to a material change in the scope, timing and cost of this project.

The capital expenditure forecast for the FY2026-30 regulatory period represents the largest capital program in its history, which is being carefully planned and managed to ensure timely and efficient delivery. The capital program is underpinned by a robust planning and governance framework.

Rate of Return

GAWB has estimated its Weighted Average Cost of Capital (WACC) having regard to the QCA's Rate of Return Report. The current economic and financial market environment is materially different compared to that prevailing at the time GAWB's WACC was set (back in 2020) for the current FY2021-25 regulatory period. This is largely reflected in an increase in the risk-free rate, which was at historical lows in 2020. GAWB's proposed estimates for benchmark gearing, gamma and the return on equity are based on the methodologies and parameter inputs preferred by the QCA in its Rate of Return Report.

GAWB's return on debt will be estimated using the trailing average approach for the first time in the FY2026-30 regulatory period. The proposed approach differs from the QCA's preferred approach as follows:

- a ten-year transition will be applied, as required under the Referral Notice; and
- GAWB is proposing the application of a weighted average, based on advice from Queensland Treasury Corporation (QTC) regarding the most efficient debt management practice to apply and in view of the size of its expected borrowings in the FY2026-30 regulatory period.

GAWB's indicative post-tax nominal WACC is 7.88% (based on an a 20-day averaging period ending 30 April 2024). This is materially higher than the current WACC of 4.74%, which is mainly driven by the increase in the risk-free rate. This outcome is beyond GAWB's control. The WACC will be updated just prior to the setting of GAWB's final prices to apply from 1 July 2025, to reflect changes in market interest rates, which could result in a lower or higher final WACC.

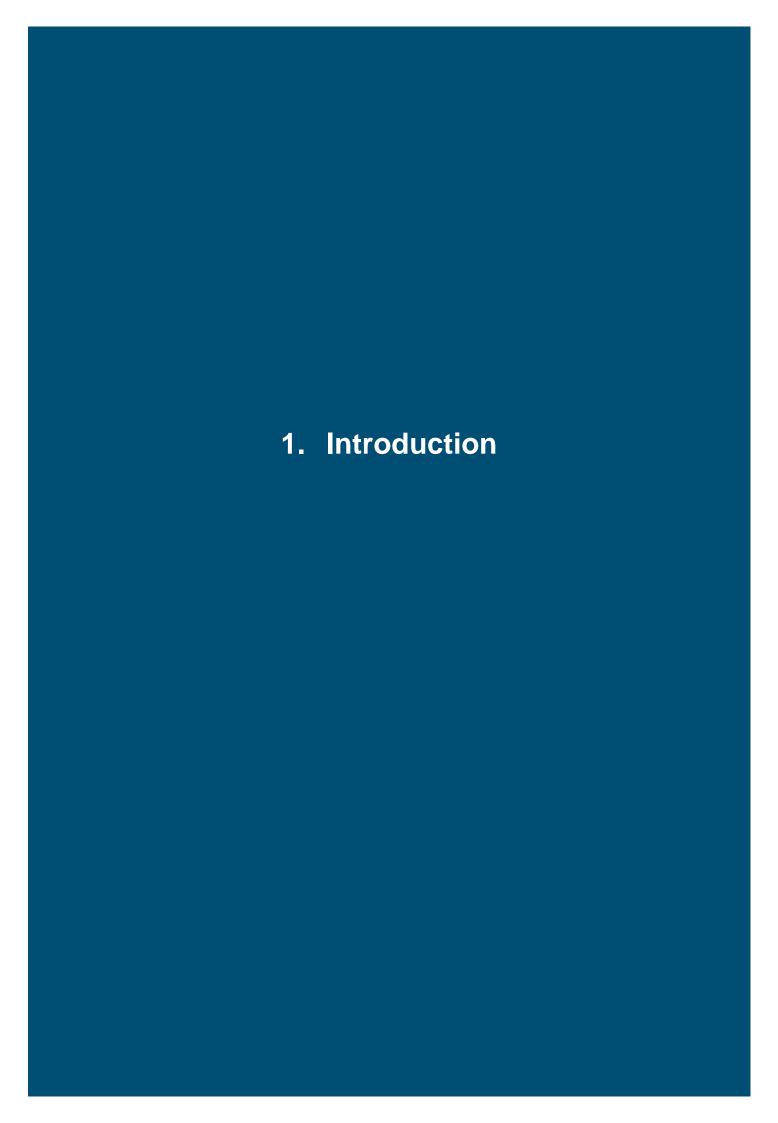
GAWB will apply the final WACC to set prices for the duration of the FY2026-30 regulatory period. While the trailing average approach involves updating the return on debt for prevailing market rates in each year of the regulatory period, GAWB has a limited ability under its commercial arrangements to adjust prices during the period. GAWB is therefore proposing to do this via a net present value neutral end-of-period adjustment.

Revenue and Prices

GAWB has applied the building blocks approach to forecast its total revenue requirement for the five years of the FY2026-30 regulatory period, which is then subject to smoothing.

GAWB will apply the existing multi-part zonal tariff structure to set prices. As noted in Chapter 3, GAWB is going through a transformational period which necessitates a comprehensive review of GAWB's pricing structure. However, it is neither appropriate, nor feasible, to undertake such a review as part of the 2025 Price Monitoring Investigation. A tariff review requires extensive customer and stakeholder engagement, and GAWB therefore intends to commence this review in time for it to be completed prior to the QCA's next price monitoring investigation (i.e. FY2030-35).

The indicative prices that are forecast to apply from 1 July 2025 vary across the existing pricing zones. Zonal prices are provided in Chapter 12.



This section provides an overview of the scope for the current Price Monitoring Investigation, relating to prices to apply from 1 July 2025 to 30 June 2030.

1.1 Introduction

On 14 December 2023 the Queensland Treasurer and Minister for Trade and Investment directed the QCA to undertake a Price Monitoring Investigation¹ for the period 1 July 2025 to 30 June 2030, of the relevant monopoly business activities of GAWB. GAWB's relevant monopoly business activities included its existing business operations (see Chapter 2) and those related to the construction and operation of the FGP.

On 23 May 2024 an amended Referral and Direction Notice (Referral Notice) was issued to the QCA, modifying the scope of the 2025 Price Monitoring Investigation to only relate to GAWB's existing business operations. A copy of the updated Referral Notice is provided in Attachment 1.

The recovery of costs associated with the construction and operation of the FGP (inclusive of all costs associated with the purchase of water allocations from the Fitzroy River) are to be addressed in the future, in a subsequent investigation.

GAWB's regulatory submission has been prepared in accordance with the terms of the updated Referral Notice and consists of:

- an overview of GAWB's operating environment;
- performance over the current regulatory period;
- forecast demand;
- forecast operating and capital expenditure;
- the return on capital; and
- the proposed ARR.

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¹ Under s23A of the Queensland Competition Authority Act 1997.

2. GAWB's B	usiness	

This section provides an overview of GAWB's business, including its core responsibilities, customer base, key regulatory obligations and long-term planning approach.

2.1 About GAWB

GAWB was established in 1973 as a Project Board under the *State and Regional Planning and Development, Public Works Organisation and Environmental Control Act 1971–74 (Qld).* On 1 October 2000, GAWB commenced operations as a Category 1 Water Authority under the *Water Act 2000 (Qld)* (Water Act) and on 1 July 2008, GAWB became a registered service provider under the *Water Supply (Safety and Reliability) Act 2008 (Qld)* (Water Supply Act).

GAWB owns and operates Awoonga Dam on the Boyne River, along with a network of delivery pipelines, water treatment plants and other bulk water distribution infrastructure required to service its customer base. GAWB has a water allocation of 78,000 megalitres (ML) per annum from Awoonga Dam, granted under the Water Act. The Fitzroy Basin Water Management Protocol (June 2023) contains a process to grant GAWB up to 16,667 megalitres (ML) of high priority water per annum from the 'strategic infrastructure reserve' from the Rookwood Weir Water Supply Scheme on the Fitzroy River.²

2.1.1 GAWB's Core Responsibilities

Supply of Bulk Water Services

GAWB provides both raw (high reliability 24/7 continuous flow) and treated water to industries, located in Gladstone and surrounding communities, and the GRC. Raw water is treated at GAWB's two water treatment plants, in accordance with the Australian Drinking Water Guidelines set by the National Health and Medical Research Guidelines, and distributed to customers.

Figure 2.1 provides an overview of GAWB's major assets.

Department of Regional Development, Manufacturing and Water (2023). Fitzroy Basin Water Plan Area, Water Management Protocol, June.

Curtis Island E **OF GAWB ASSETS** Yarwun Facing Island Gladstone Circuit Central Byellee **East End West Stowe** Gladstone Harbour Boyne Toolooa Island Tannum Wurdong Sands Heights Calliope **KEY** Benaraby **RESERVOIR** PUMP STATION **OFFLINE STORAGE** TREATMENT PLANT **HEAD OFFICE** HATCHERY Awoonga Dam **RAW WATER PIPELINE** TREATED WATER PIPELINE PIKE'S CROSSING EMERGENCY **MUSTER POINT**

Figure 2.1: GAWB's Major Assets

Catchment Management

GAWB's land holdings total approximately 23,850 hectares, consisting predominantly of inundated and rural land. Water quality is significantly influenced by the type and management of land use activities in the catchment.

GAWB has extensive obligations that relate to ensuring its daily operations, investment activities and public use activities do not harm the environment and actively support upstream freshwater ecosystem viability. Further, as a significant landholder in the region, GAWB must meet its obligations for controlling noxious weeds and pests on its land and undertake general catchment management activities.

GAWB develops long-term plans in partnership with its catchment communities and regional stakeholders to ensure a consistent approach to land management and water quality. The plans identify and prioritise management actions and strategies to maintain or enhance the source water quality.

Fish Stocking and Monitoring

GAWB operates a fish hatchery in response to an Environmental Impact Statement (EIS) condition, aimed at mitigating the impact of the dam on migratory species of fish native to the Boyne River System. In 2022 GAWB opened its new multi-species fish hatchery at Lake Awoonga, named Aquaculture Gladstone.

GAWB's general fisheries permit allows for the production and release of up to 1.35 million barramundi, mangrove jack and sea mullet fingerlings per annum into the Boyne River System. Aquaculture Gladstone also provides fingerlings to local impoundments such as Lake Monduran. These types of impoundments are stocked with native fish specifically for recreational fishing, to provide a sustainable fishing option that reduces pressure on wild fish stocks.

Recreational Facilities

GAWB provides and maintains recreational facilities at Lake Awoonga, such as boat ramps, picnic areas, camping grounds and walking trails. These facilities are well regarded and frequented by the community and tourists, making a positive contribution to the liveability of the region.

Over the current regulatory period, significant investments have been made to improve and expand the recreational facilities at Lake Awoonga. Figure 2.2 provides an overview of current (or under construction) recreational facilities.



Figure 2.2 Lake Awoonga Recreational Strategy

2.2 GAWB's Customers

GAWB's customer base is unique when compared to other urban and/or bulk water service providers.

GAWB supplies potable water to GRC and 29 domestic connections. This represents approximately 20% of annual water supplied to customers. The remaining 80% of water volume supplies industrial customers who are predominately export-oriented businesses or are large electricity generators operating in the National Electricity Market.

GAWB's customer profile creates more volume risk compared to other bulk water service providers who are primarily servicing a large and comparatively stable customer base comprising a diverse mix of residential, commercial and industrial customers. The value of Gladstone's industry to the state economy also places a very high level of importance on GAWB taking proactive steps with the purpose of ensuring the future security of supply.

GAWB currently supplies bulk water services - raw and treated - to businesses operating in, or supporting, the following key industries:

- thermal electricity generation;
- liquified natural gas (LNG) production;
- alumina / aluminium production;
- chemical production; and
- coal (export).
- In the FY2026-30 regulatory period, this will extend to include hydrogen production.

Customer Expectations – Network Performance and Certainty of Supply

Whilst water is not a major cost component for most of GAWB's industrial customers, it is an essential input for production. It is the criticality of continuous high reliability access to water that drives the way in which GAWB operates the water delivery network and seeks to ensure there is continuous supply, under either a drought or growth scenario. In other words, security of supply is a priority for customers, and they are supportive of GAWB taking actions to prevent or mitigate potential adverse impacts on their operations or investments that would result from interruptions of supply.

Most of GAWB's industrial customers run 7 days a week, 24-hour continuous operations. This places increased pressure on GAWB's maintenance and investment programs, as works need to fit in with the operational needs of customers.

GAWB's network planning and operational performance risk frameworks place an increased weighting on the need for a low number of supply interruptions, due to the economic consequences of supply interruptions to customers. This task is made more challenging as a result of the environmental conditions, for example, various sections of the network are located over water or in corrosive soils, as well as the likelihood of tropical cyclones.

2.3 Key Regulatory Obligations

As a provider of bulk water services, GAWB must comply with a range of legislative and regulatory requirements, including the following:

- Dam Safety: GAWB must ensure that the Awoonga Dam does not pose unacceptable risks to downstream communities. GAWB has implemented a comprehensive dam safety management program in accordance with the Water Supply Act and the Dam Safety Conditions Schedule for Awoonga Dam (2022) and supporting published guidelines issued by the Department of Regional Development Manufacturing and Water (DRDMW), the Queensland Dam Safety Regulator. GAWB also maintains an Emergency Action Plan for Awoonga Dam.³ This is reviewed annually and renewed every five years, most recently in 2022-23. There are other guidelines informing this program, including the Australian National Committee on Large Dams (ANCOLD) Guidelines on Dam Safety Management (2003).
- Notifications: There are a number of residential properties situated in close proximity to Awoonga Dam. GAWB provides residents who may be potentially affected by floodwaters with regular updates on dam levels, hourly inflows and evacuation routes. Notifications relating to an emergency are described in the Emergency Action Plan.
- Noxious Weeds and Pests: As a significant landholder in the region, GAWB must meet its obligations for controlling noxious weeds and pests on its land and undertake general catchment management activities.
- **Environmental Obligations:** GAWB has extensive obligations that relate to ensuring its daily operations and investment activities do not harm the environment and actively support upstream freshwater ecosystem viability. A key obligation in this regard is one of the conditions of the State Government's approval of the Awoonga Dam wall raising in 2001, which is to stock Lake Awoonga with migratory species of fish that are natural to the Boyne River (barramundi, mangrove jack and sea mullet). This is contained in GAWB's General Fisheries Licence procured under the *Fisheries Act 1994*.
- Water Quality: GAWB monitors water quality for various purposes, including environmentally relevant activities, the Awoonga Water Supply Scheme Resource Operations Licence (Awoonga ROL) and to maintain compliance with GAWB's Drinking Water Quality Management Plan.

2.4 Long Term Planning

Planning for long term water security and performance for the region is also a key function for GAWB as this supports the significant multi-billion dollar long-term capital investments of its export-orientated customer base. Industry in Gladstone generates around \$6 billion in gross regional product every year and these activities depend on significant quantities of water now

In accordance with Water Supply (Safety and Reliability) Act 2008.

Refer: Department of State Development (2001). Raising of the Awoonga Dam (Boyne River), Environmental Impact Statement Assessment Report, January.

and into the future.⁵ Therefore, it is vital that long-term planning ensures a lack of water supply does not occur.

To ensure long-term, high reliability water is provided to industry, GAWB actively plans for the region's potential water needs and future water supply options.

Planning for Water Security

As the owner/operator of Awoonga Dam, which is the region's sole major water supply, GAWB plays a key role in providing water security. To do this, it must actively plan by considering the region's potential water needs, future water supply options and demand side alternatives. GAWB must also consider the impact weather conditions will potentially have on current and future water supply options.

In recognition of the economic importance of the region to Queensland, together with customers' expectations of continuous supply (irrespective of external factors such as drought), GAWB has for more than a decade set out guiding principles and a road map for addressing water security for the region.

On 24 February 2023, an investment decision was announced by the Queensland Government regarding the approval of the FGP. The FGP will run from the Lower Fitzroy River in Rockhampton and connect to GAWB's existing network at Yarwun (see Figure 2.3.).

The FGP comprises a 117km pipeline, a water treatment plant, reservoirs and pumping stations at locations along its alignment including Laurel Bank, Alton Downs and Aldoga. The FGP will have capacity to transport 30 gigalitres (GL) of water per annum from the Fitzroy River to Gladstone. Construction of the FGP and associated infrastructure has commenced and it is expected to be operational in 2026.

As noted in Chapter 1, GAWB's 2025 Price Monitoring Investigation does not include the costs associated with the construction and operation of the FGP as this will be considered in a subsequent investigation closer to the date of commissioning, which is expected by mid-2026.

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https://statements.qld.gov.au/statements/97228 {accessed 31 May 2024}.



Figure 2.3: Fitzroy to Gladstone Pipeline

Climate Resilience

Sustainable Water Management

According to DRDMW, climate change modelling suggests the likelihood of severe weather events will increase over time:⁶

...overall, Queensland's climate is likely to become drier in the future, with warmer temperatures leading to greater evaporation, longer periods of dry weather and greater intensity in rainfall events. It is likely that we will experience more frequent, longer and potentially more severe droughts and other intense weather events as a consequence.

Investments such as the FGP directly address the risks to water security in the Gladstone region due to the increasing likelihood of these events occurring.

Asset Resilience

The risks presented by climate change means that GAWB's planning framework needs to ensure that its network assets remain resilient in the face of the region's variable and changing climatic conditions, including the likelihood of more frequent and/or severe weather events. This also needs to be done in a prudent, efficient and sustainable way.

Department of Regional Development, Manufacturing and Water (2023a). Towards Climate Resilience and Sustainable Water Management, Queensland Government. p 4.

GAWB has previously highlighted the challenges in balancing the proactive management of climate-related risks with reactive responses, such as increased maintenance.⁷ These risks therefore need to be managed holistically and with sufficient flexibility to adapt and respond to changes in its future network requirements.

In terms of GAWB's planning framework, it needs to be able to change to enable it to respond to what is currently known, that is, what is most likely to occur given the information that is currently available. Given the inherent uncertainty in managing climate change risks, including the emergence of new (or changing) information, this is an ongoing process.

Potential Water Needs

Responses to policy and legislative changes such as the Queensland Government's Renewable Energy Targets, and Queensland's ready availability of renewable energy, means that Queensland, in particular Gladstone, is well placed to be involved in the manufacture, transportation and use of green hydrogen. According to Trade and Investment Queensland, there are over 30 hydrogen and related projects in planning (or mature stages) across Queensland.⁸

Water is essential for hydrogen production and conversion to hydrogen carriers, such as ammonia. Water is consumed in the production process to generate green hydrogen, as well as being an option for a cooling medium for production processes.

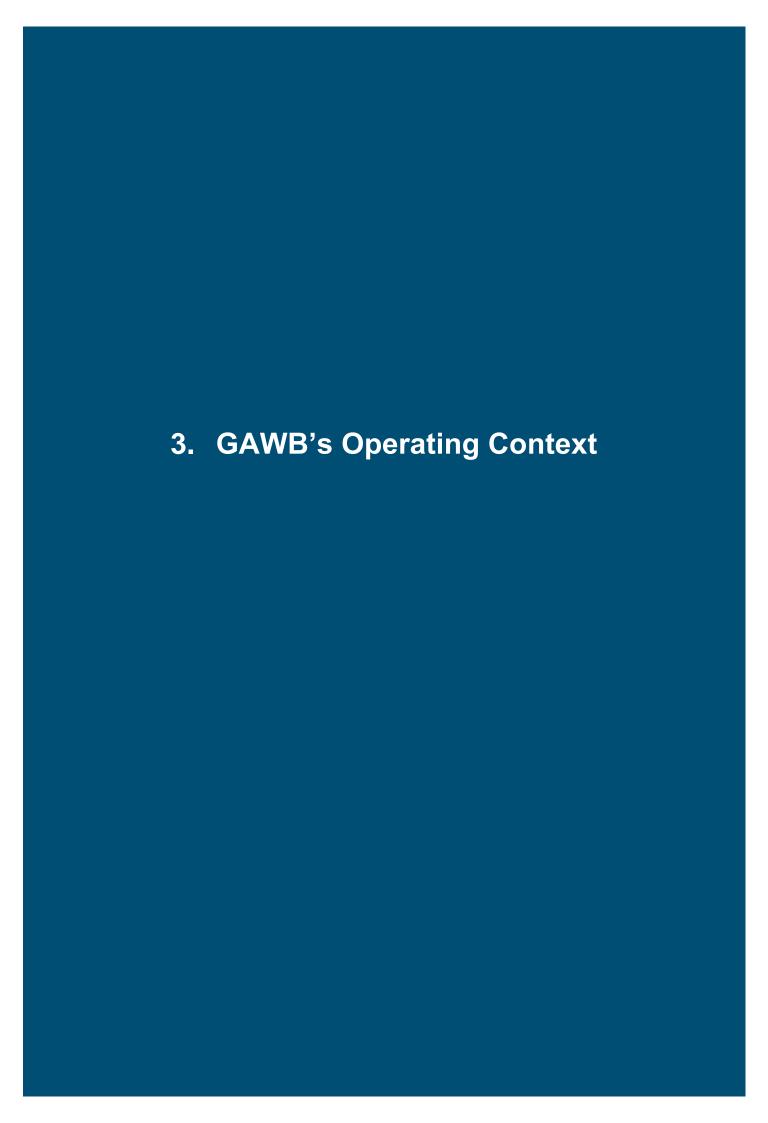
In the second half of 2023, GAWB completed a water application and assessment process and established a water queue for contracting the remaining unallotted water in Awoonga Dam. The established water queue identifies that demand for water from existing and potential customers is expected to exceed GAWB's existing annual allocation from Awoonga Dam within this regulatory period. This is primarily due to the increased level of interest from the hydrogen and renewable energy sector (see Chapter 3). GAWB's Queueing Guideline (Source Capacity), a summary of which is available on GAWB's website, ensures water is appropriately allotted to water seekers and supports economic development in the Gladstone region.

DRDMW is also undertaking a detailed business case on a desalination plant in Gladstone to supply water to the green hydrogen industry. 10 GAWB is contributing to this long-term planning activity.

Gladstone Area Water Board (2022). Submission to the QCA's Discussion Paper on its Climate Change Expenditure Review, December.

https://www.tiq.qld.gov.au/international-business/invest-in-queensland/industry-opportunities/new-energy/hydrogen-projects-in-queensland {Accessed 28 May 2024}

https://gawb.qld.gov.au/wp-content/uploads/2023/06/FINAL_Summary-of-GAWB-Queuing-Guideline.pdf
 Department of Regional Development, Manufacturing and Water (2023b). Queensland Water Strategy Roadmap, Queensland Government, p 4.



GAWB has undergone substantial change throughout the current regulatory period and this will continue during the next regulatory period. These changes include macro-economic factors and government policy. The changes have impacted, and are expected to continue to impact, expenditure into the future. These are described below.

At the time of the 2020 Price Monitoring Investigation, GAWB's operations and the assumptions supporting the forecast operating and capital expenditure allowances used to set prices were reflective of a 'steady-state' business. GAWB's focus for the regulatory period was to mature its planning practices, deliver on several significant capital projects (i.e. the Awoonga Dam Improvement Project, 11 Hatchery and the Lake Awoonga Recreational Strategy) and to continue to support economic development in the region through consistent operational performance. However, the business and operating environment that emerged over the current regulatory period is markedly different to this 'steady state' environment.

The operating environment has been shaped by various direct and indirect factors. Many have been outside GAWB's control, for example COVID-19, policy and legislative changes, the sustained impact of COVID-19 on macroeconomic factors (e.g., bond market yields) and geopolitical instability.

These factors have impacted the way GAWB has delivered against the current regulatory period's expenditure forecasts, including impacts on project delivery timeframes and cost as well as the recruitment and retention of staff.

3.1 Macroeconomic Factors

3.1.1 Inflation

In May 2020, when the QCA delivered its 2020 Final Report, the COVID-19 pandemic was in its relatively early stages. It was difficult to account for the impacts of the pandemic at the time that GAWB's FY2021-25 revenue and prices were set, as its duration and impact remained highly uncertain. In reviewing the escalation factors applied to operating expenditure, the QCA noted that the "economic impacts of the COVID-19 pandemic cannot be fully reflected in our estimated escalation factors at this time." 12

One of the most prominent impacts of the pandemic has been inflation. In the lead-up to the QCA's 2020 Price Monitoring Investigation, inflation had been persistently below the Reserve Bank of Australia's (RBA's) target band, which was consistent with trends across developed economies. With the onset of the pandemic the opposite has occurred, with central banks struggling to bring inflation under control. Inflation has also been highly volatile (see Figure 3.1), peaking at 7.8% in the December quarter 2022.¹³

¹¹ The Awoonga Dam Improvement Project was referred to as the Awoonga Dam Spillway Upgrade Project for the purposes of the 2020 Price Monitoring Investigation.

Queensland Competition Authority (2020). Final Report, Gladstone Area Water Board Price Monitoring 2020-25, Part A: Overview, May, p.24.

Reserve Bank of Australia (2023). Statement on Monetary Policy, August 2023. https://www.rba.gov.au/publications/smp/2023/aug/inflation.html



Figure 3.1: Australian CPI, WPI and PPI growth, 2010 – 2023 (ABS Data)

Source: Deloitte (2024).14

3.1.2 Electricity

The National Electricity Market has experienced a significant level of volatility since 2022 and wholesale price uncertainty remains for the foreseeable future.

Figure 3.2 shows the Queensland wholesale electricity base contract prices as published by the Australian Stock Exchange (ASX) and demonstrates the level of price volatility starting particularly in 2022, driven by a range of global and local factors. These wholesale prices are generally the base upon which retailer 'black electricity' offers are made.

The red circles on the graph indicate the timing of the renewal of GAWB's electricity contracts. Concurrent with the development of this submission, GAWB has been in the process of renewing these contracts, which were last renewed around the commencement of the current FY2021-25 regulatory period. The chart highlights the step-up in contract prices in the timeframe between these two renewal processes, which is largely driving a step change in GAWB's electricity costs (refer Chapter 7). It also illustrates the significant volatility in prices over the current FY2021-25 regulatory period.

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Deloitte (2024). Regional Cost Pressures Report, p.5

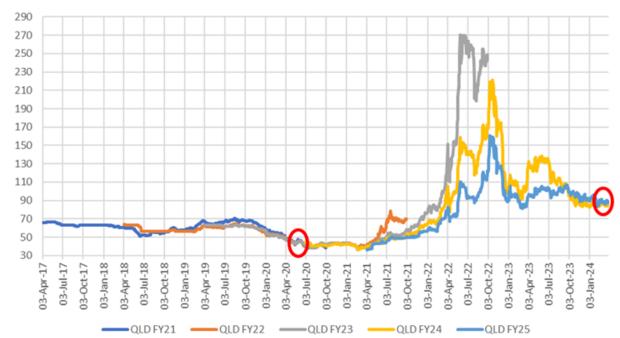


Figure 3.2: Queensland Wholesale Electricity Base Contract Prices

Source: Australian Stock Exchange

3.1.3 Resource Constraints (Materials, Labour)

Domestic and global supply chain constraints significantly exacerbated economic and operational constraints, leading to labour and material shortages resulting in escalating costs for labour, transportation and fuel. These pressures have been further exacerbated and protracted with the Russia-Ukraine war.

These issues have had a direct impact on GAWB as it competes for inputs and resources, not only at a state and national level, but also within Gladstone. For example, at various times during the current regulatory period, Queensland steel suppliers have experienced Delivered In Full On Time and In Specification rates as low as 26.7% against targeted levels of 95%. GAWB has also experienced delivery delays attributable to suppliers prioritising other larger industries within the region. These issues adversely impacted the delivery timeframes of GAWB's capital program and/or has increased the delivered cost of capital projects, relative to initial capital forecasts.

The forward outlook for total construction activity is high, compared to the years immediately preceding the pandemic (i.e., prior to 2020). This trend is also applicable to Queensland, as shown in Figure 3.3, for major engineering construction projects expected to be in the construction phase over the next five years to 2027-28.

¹⁵ Stramit (2021). Stramit Supplier DIFOT report card – Queensland, May.

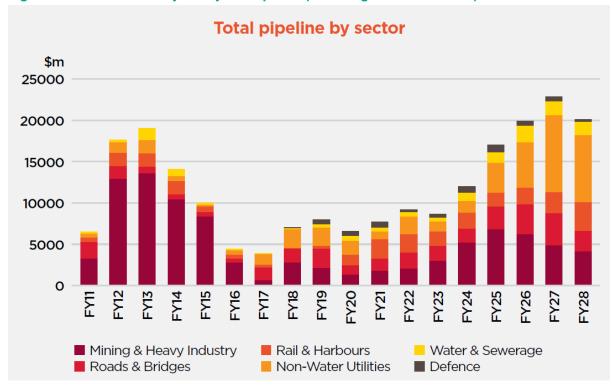


Figure 3.3 Queensland Major Projects Pipeline (including forecast to 2028)

Source: Oxford Economics for the Queensland Major Contractors Association¹⁶

The current five-year engineering construction projects pipeline has risen to \$92 billion, a \$20.6 billion (29%) increase from 2022.¹⁷

During the FY2021-25 regulatory period GAWB has experienced increased cost and time pressures in securing the necessary resources and workers to support its operational activities and capital investment program. These conditions are driven by a number of factors, including the strong demand to support construction activity.

The bulk of this planned work is concentrated outside of Greater Brisbane, which raises the delivery risk in these regions. The locations with the largest net gain in major engineering construction projects over the pipeline are Wide Bay, Fitzroy (which includes Gladstone) and Brisbane, with these regions representing 43% of activity.¹⁸

The shortfall of infrastructure workers at a national level has widened compared to the pre-COVID-19 period as shown in Figure 3.4 below. This trend is expected to continue. As evident from the chart, this is driven by the strong outlook for construction demand and relatively moderate growth in labour supply.

Queensland Major Contractors Association (2023), Queensland Major Projects Pipeline 2023, Executive Summary

¹⁷ Queensland Major Contractors Association (2023), p.2.

¹⁸ Queensland Major Contractors Association (2023), p.3.

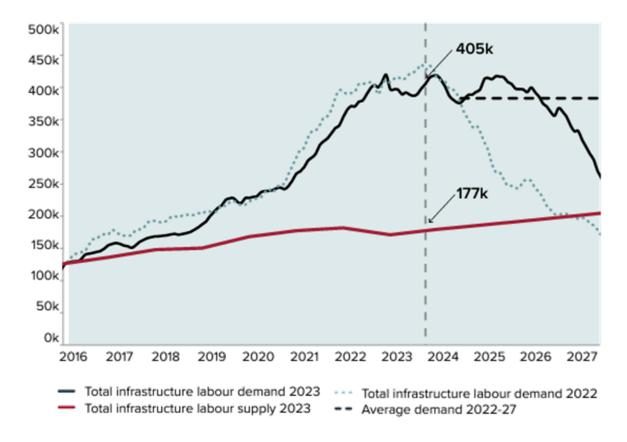


Figure 3.4 Demand and Supply of Public Infrastructure Workers¹⁹

Source: Infrastructure Australia (2023)²⁰

This also highlights how in 2022, total infrastructure labour demand was projected to decline more rapidly, whereas the peak in demand is now forecast to be maintained, at least for the next couple of years.

As Infrastructure Australia's report shows, the key skill sets required for construction projects that have seen the strongest level of annual compound growth since 2020. The skills in demand are project management professionals, engineers, scientists and architects, structural and civil trades and labour, and finishing trades and labour. Engineering occupations are the greatest shortfall.²¹ It also explains the long lead time for professionals entering construction, with one quarter of these professionals exiting within three years. It considers that the rising shortage in trades and labour is yet to peak, and while growth in this labour force has outpaced other occupation groups "public infrastructure has not attracted a share of the incremental labour pool."²²

Construction Skills Queensland has found that in Queensland, due to the significant increase in total construction activity, construction industry vacancies have been rising. As total

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Public infrastructure pipeline demand includes major public infrastructure, non-major public infrastructure projects, road maintenance projects and privately funded infrastructure for public use

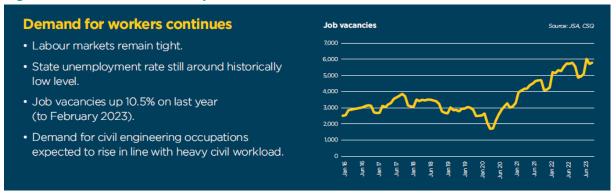
²⁰ Infrastructure Australia (2023) Infrastructure Market Capacity 2023 Report, December. p 64

²¹ Infrastructure Australia (2023). p.69.

²² Infrastructure Australia (2023). p.77.

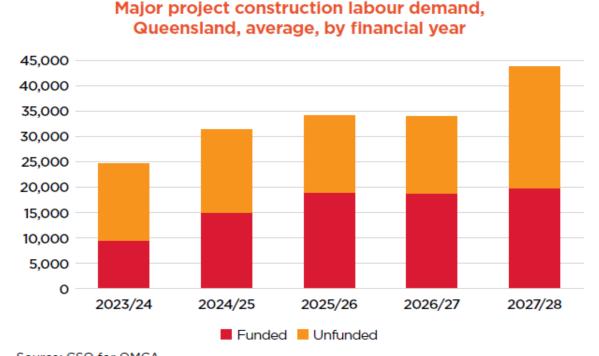
construction activity is forecast to continue to increase the demand for major project construction labour is also forecast to increase (see Figure 3.5 and Figure 3.6).

Figure 3.5 Construction Industry Labour Demand Profile



Source: Construction Skills Queensland²³

Figure 3.6 Major Project Construction Labour Demand, Queensland, Average by Financial Year



Source: CSQ for QMCA

Source: Queensland Major Contractors Association (2023)²⁴

GAWB engaged Deloitte to examine the nature and drivers of these cost pressures and the extent to which they are likely to persist into the next regulatory period. Deloitte identified numerous particular pressures that are evident at a regional level. This included higher

Construction Skills Queensland (2024) Industry Outlook At a Glance 2023-24, p.2.

Construction Skills Queensland (2023) Queensland Major Projects Pipeline 2023, p. 9.

materials costs, influenced by delivery costs and longer delivery timeframes for inputs that cannot be sourced locally, along with limited labour supply in regional areas.

Deloitte observed that while Gladstone has a robust core worker base, it cannot retain a permanent labour pool that is suited to the delivery of larger capital programs. The Gladstone region hosts an active shutdown circuit that impacts worker mobility due to strong rates of pay for casual staff, overtime rosters and living away from home allowances. While this has always been a characteristic of the regional labour market, Deloitte notes the deepening imbalance in labour supply and demand as competition for resources intensifies. This is a point of contrast between GAWB and larger metropolitan bulk water suppliers, and water utilities more generally.

Deloitte expects that while pressures on material costs may moderate in the medium-term as inflation subsides globally, higher costs, labour shortages and increased competition for resources across sectors are expected to continue into the FY2026-30 regulatory period. Deloitte's report will be made available to the QCA.

3.1.4 Supply Chains

As noted above, assumptions related to cost and reliability of key supply chains for both operational and capital expenditure activities changed during the pandemic and in many cases are yet to recover to pre-pandemic levels. In addition to the inflationary pressure, there has also been a need for a reassessment of risk, as in many instances the underlying risk profile for key inputs or critical spares has materially changed.

In response to the above, GAWB is in the process of reviewing asset criticality and supporting activities (such as critical spares and strategic procurement activities) to assist in mitigating its risks in the availability and cost of key inputs.

3.2 Government Policy

GAWB's operating environment has also changed due to developments in Government policy (national and state) and key capital investment decisions. These are having a transformational impact on GAWB, as discussed below.

3.2.1 Water Security

As noted in Chapter 2, the Queensland Government announced the approval of the FGP in early 2023. Due to this investment decision there will be a material change in the operational size and complexity of the network and services provided by GAWB during the FY2026-30 regulatory period. To be clear, all costs associated with the FGP are excluded from the current Price Monitoring Investigation and have therefore not been included in GAWB's revenue and prices as set out in this submission.

3.2.2 Emerging Hydrogen Industry

In 2019 the Queensland Government released its *Queensland Hydrogen Industry Strategy* 2019-2024. Gladstone was identified as a focus point for hydrogen development due to the industries already operating in the region, access to a deep-water export port and skilled local workers. Access to land, i.e., the State Development Area north of Gladstone, also provided an ability for the Queensland Government to support large-scale industrial development.

Since the release of the Queensland Hydrogen Industry Strategy, of the 30 planned projects currently identified on Trade and Investment Queensland's website, at least eight of these are actively looking to invest in Gladstone. The emerging hydrogen industry is supported by a range of state government incentives, including the \$2 billion Queensland Renewable Energy and Hydrogen Jobs Fund.

The hydrogen industry is in the early stages of development as evidenced by the Federal Government industry support packages released in the 2024-25 budget announced in May 2024. No commercial scale hydrogen facility in Gladstone has reached a final investment decision at this time, with the most advanced projects at the Front-End Engineering Design (FEED) phase of project development.

Over the last two to three years, GAWB has been working with various hydrogen and related project proponents to understand their future water and network requirements. The key areas identified by proponents for future growth and the associated activities are:

- Aldoga: green manufacturing and hydrogen production facilities;
- Yarwun: hydrogen and ammonia production;
- Fisherman's Landing: hydrogen liquification facilities, ammonia production and product storage and shipping; and
- Targinnie: hydrogen production.

Since the lifting of its Low Supply Alert (LSA) in June 2023,²⁶ GAWB has been working closely with several proponents with a view to entering into long-term (20 year) water supply contracts. These hydrogen proponents are already taking water or propose that they will be during the FY2026-30 regulatory period to support their operations. The capital forecast for the next regulatory period includes network augmentation necessary to support these new customers.

3.2.3 Guidelines on Safety Assessment for Referrable Dams

Awoonga Dam is classified as a Category 2 Referable Dam under section 341 of the Water Supply Act. As a referable dam, GAWB is required to comply with the State's guidelines for dam safety. Failure to comply with the guidelines would constitute a breach under the Water Supply Act.

In 2015 GAWB committed to a staged approach to dam safety upgrades in accordance with the State's Acceptable Flood Capacity (AFC) Guidelines that were in effect at that time. Under this approach, 65% of the required flood capacity for Awoonga Dam was to be achieved by 2025, with a separate construction project to be undertaken to achieve 100% AFC by 2035. This staged scope of work was adopted as part of the Awoonga Dam Spillway Capacity Upgrade Project (now referred to as the Awoonga Dam Improvement Project).

The FY2021-25 capital expenditure forecast submitted to the QCA as part of the 2020 Price Monitoring Investigation included \$60.05 million (inclusive of Interest During Construction

Trade and Investment Queensland (2024). https://www.tiq.qld.gov.au/international-business/invest-in-queensland/industry-opportunities/new-energy/hydrogen-projects-in-queensland. {Accessed 23 May 2024}. This includes the Pacific Solar Hydrogen Project, which as indicated on this website, is now focused on solar energy development.

https://www.gawb.qld.gov.au/planning/drought-management-plan/

(IDC)) to undertake work required to achieve 65% AFC for Awoonga Dam. It also included the installation of additional post tensioned anchors to improve stability, which were works required by 2035. This forecast was based upon an engineering study conducted in 2020 to review and update previous studies.

In 2021 the Dam Safety Regulator issued the *Guidelines* on Safety Assessments for Referable Dams,²⁷ which replaced the AFC guidelines. The new guidelines emphasised a risk-based approach. As a result, new engineering studies were conducted to better understand the risk position at Awoonga Dam. The new studies indicated that the scope of works required would increase significantly to comply with current standards and guidelines.

Following meetings with the Queensland Dam Safety Regulator and considering the revised guidelines and increased scope, GAWB determined the best way to progress this project was to adopt a risk-based methodology to address all elements of the dam. This has meant that the project scope has expanded, and costs have increased significantly. The resulting shift in approach has meant that the Awoonga Dam upgrade works captured in the FY2021-25 capital forecast were no longer appropriate, and necessitated a reassessment of the delivery of the necessary dam improvements.

Based on GAWB's reassessment of the above obligations and associated approach, this project is not anticipated to be capitalised during the FY2026-30 regulatory period, and so will not impact pricing during that period.

GAWB will continue to progress the project over the FY 2026-30 regulatory period with a focus on concept design and reviewing the risk assessment (including interim risk reduction measures).

3.2.4 Climate Change

28 May 2024}

The Department of Energy and Climate has set out the Queensland Government's policies and approach to responding to climate change, ²⁸ which is based on a (current) greenhouse gas emissions reduction target of 75% by 2035, on the pathway to net zero emissions by 2050. This was an increase from the interim target specified in its previous Climate Change Transition Strategy, which was a 30% reduction in emissions by 2030.²⁹

In February 2024 it released Queensland's 2035 Clean Economy Pathway: 75% by 2035, which outlines how this will be achieved.³⁰ The Central Queensland Hydrogen Hub (based in Gladstone) is identified as one of the initiatives that will be used as part of its decarbonisation strategies.

Having regard to the Queensland Government's policy and targets, GAWB has a Board approved Climate Change Strategy which sets an emissions reduction target for 2020-2030. An Action Plan involving direct and indirect initiatives has been developed and implemented

Department of Regional Development, Manufacturing and Water, Guidelines on Safety Assessments for Referrable Dams, November 2023, Version 8

²⁸ https://www.energyandclimate.qld.gov.au/climate {Accessed 28 May 2024}

https://cabinet.qld.gov.au/documents/2017/Jun/ClimChg/Attachments/TransitionStrategy.PDF {Accessed 28 May 2024}
 https://www.epw.qld.gov.au/__data/assets/pdf_file/0028/48493/queensland-2035-clean-economy-pathway.pdf {Accessed

pursuant to this Strategy reflecting an emissions reduction hierarchy as referred to by the QCA in assessing the prudency and efficiency of various options for expenditure relating to climate change.³¹ Direct action comprises activities such as the installation of rooftop solar photovoltaics and the Awoonga Dam Solar Installation. Over the medium to longer term, the nature, timing and impact of climate change on the operations of GAWB and its customers remains uncertain.

3.2.5 Aquaculture

The Queensland Government has identified aquaculture as an important strategy in developing and maintaining a sustainable fisheries industry for the future.³² This includes the identification of eight Aquaculture Development Areas (ADAs) as suitable sites for land-based aquaculture development, which includes Gladstone.³³ These locations have been chosen based on their potential for aquaculture farming, environmental sustainability and compatibility with existing state, regional and local planning schemes. In 2022-23, the total value of aquaculture production in Queensland reached a record high of \$263.2 million.³⁴

The Gladstone community sees a role for GAWB in partnering with local schools and universities to develop and deliver educational programs in the areas of aquaculture and environmental sustainability. This will ultimately support the region's contribution to the Queensland Government's policy initiatives and the growth of the industry in Gladstone.

As outlined in Chapter 2, GAWB has a regulatory obligation which is contained in its General Fisheries Licence to stock Lake Awoonga with migratory species of fish that are natural to the Boyne River. GAWB's new hatchery complies with this obligation and provides capacity to meet the community's needs and make a positive contribution to Gladstone as an ADA.

3.3 Key Industries

Over the last 25 years the breadth of commodities produced and/or exported from Gladstone has grown. Diversification has come about through discrete periods of significant investment, similar to what is being experienced with the emerging hydrogen industry.

The major commodities currently exported from Gladstone are coal, LNG, alumina and aluminum. With the emergence of new industries, GAWB has incrementally expanded its water delivery network, including the capacity of Awoonga Dam. This is due to the nature of GAWB's customers and that there is limited opportunity for network infill.³⁵

The incremental nature of investment, and how GAWB has supported this through network expansion in terms of increases in the Regulated Asset Base (RAB), is shown in Figure 3.7.³⁶

³¹ Queensland Competition Authority (2023a). Guideline, Climate Change Related Spending, September.

https://www.daf.qld.gov.au/business-priorities/fisheries/aquaculture {accessed 28 May 2024}
 https://www.business.qld.gov.au/industries/farms-fishing-forestry/fisheries/aquaculture/qld/development {Accessed 28 May 2024}

Queensland Government. Ross Lobegeiger Report to Farmers, Aquaculture Production Summary for Queensland 2022-23, p.2.

Unlike bulk water suppliers servicing large populations, GAWB is unable to achieve increased network utilisation through assumptions around population growth

The RAB values shown in Figure 3.7 exclude FGP and Curtis Island.

Whilst some of the change in GAWB's RAB is due to asset replacement, this figure provides an illustrative representation of the transformational impact of supporting the emerging hydrogen sector on GAWB.

Construction of RTAY 62

Construction of RTAY 72

Construction of RTAY 82

Construction of RTAY 82

And Construction of RTAY 92

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 Year Opening RAB (Actual and Forecast Values)

Figure 3.7: GAWB's Opening RAB Value 2002-2030

3.4 Implications for Revenue and Prices

The coming years will be transformative for GAWB in its role of delivering reliable bulk water to customers in Central Queensland. The nature of GAWB's transforming business environment and outlook means that it is in a fundamentally different situation compared to previous price monitoring investigations. The degree of uncertainty faced by the business will have significant implications for GAWB's forecast revenue and prices for the FY2026-30 regulatory period, including challenges with forecasting costs out to 2030 in an environment of continued cost pressures and intensifying competition for resources.

There remains considerable uncertainties that will persist for the near to mid-term, particularly around the optimal operation of GAWB's expanding network and the resulting demand profile of the hydrogen industry and the efficient development path required to accommodate it.

Much of the uncertainty and associated risk is not easily addressed through mechanisms in the regulatory framework, such as review triggers and cost pass-throughs. Further, under its existing customer contracting framework, GAWB has limited scope to adjust prices within the regulatory period (for other than the standard annual CPI increases). GAWB notes that the existing within-period pricing stability and certainty is important to customers.

Compared to previous regulatory periods, the likely scale of change, and the accompanying risk profile, presents greater risks to GAWB's financial sustainability. GAWB notes that some Australian regulators, such as the Independent Pricing and Regulatory Tribunal (IPART) and the Australian Energy Regulator (AER) have given limited regard to this within the regulatory framework.

GAWB is currently subject to a price monitoring regime and is not currently proposing a formal mechanism to manage these risks. GAWB recognises, however, that in future there may be merit in considering approaches such as the financeability tests applied by IPART.³⁷

At the current time, it is considered essential to maintain a stable and predictable regulatory framework that has sufficient flexibility for GAWB to appropriately manage its regulatory and commercial risks in the next period and beyond.

Proposals in this submission have been put forward with a view to managing GAWB's financial sustainability, such as the form of regulation (refer Chapter 13) and the application of a weighted trailing average to estimate the return on debt (refer Chapter 9).

Another key consideration of this changing environment is the potential implications for GAWB's future pricing arrangements. GAWB considers a future review of its tariff structures and prices will need to be undertaken in time for the following regulatory period, commencing 1 July 2030. This review will require detailed scenario analysis, impact modelling and extensive customer and stakeholder consultation.

As relevant, other implications are addressed throughout this submission.

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³⁷ https://www.ipart.nsw.gov.au/Home/Industries/Special-Reviews/Regulatory-policy/Financeability-tests {Accessed 28 May 2024}

4. Current period outcomes

This chapter summarises the outcome of the Queensland Competition Authority's (QCA) Midterm Review of GAWB's final bulk water prices for the current regulatory period (up to 30 June 2023), along with GAWB's approach to customer engagement.

4.1 Mid-term Review

Under a Price Monitoring Investigation under section 23A of the *Queensland Competition Authority Act 1997* (QCA Act), the QCA publishes its findings on the matters contained in the Referral Notice. These findings have "an informative rather than deterministic purpose" and do not directly bind GAWB.³⁸ Ultimately, it is the responsibility of GAWB's Board to set bulk water prices, having regard to the QCA's findings. The QCA's review of GAWB's proposed revenue and prices for the FY2026-30 regulatory period will be the third consecutive period where it is conducted as a Price Monitoring Investigation of GAWB under section 23A of the QCA Act.

For the first time, the Referral Notice for the FY2021-25 regulatory period required the QCA to conduct a mid-term review (2023 Mid-term Review) comparing:

- annual prices charged by GAWB over the period 1 July 2020 to 30 June 2023; and
- the QCA's findings in regard to prices in its 2020 Final Report.

To inform the review, GAWB lodged a submission comparing its actual final prices and the QCA's indicative prices as published in its 2020 Final Report and provided an explanation of any deviations between its final prices and the QCA's indicative prices.³⁹ These deviations were categorised as follows:

- updates to key pricing inputs to reflect the most up to date data available prior to setting prices;
- adjustments to the modelling used by the QCA to set its indicative prices; and
- specific findings made by the QCA that were not accepted by GAWB.

GAWB also explained its standard customer engagement process and the information it provided to customers in presenting and explaining the final prices that applied from 1 July 2020, along with the subsequent annual CPI updates to prices prior to 1 July each year. This is discussed further in section 4.2.

In its 2023 Mid-term Review Report, the QCA concluded the following:⁴⁰

Our midterm review found that where GAWB's assumptions or inputs departed from our findings, GAWB has transparently applied and explained these deviations, as described in its submission and as communicated to customers. While our final report expressed different views on some matters, GAWB has nonetheless explained its reasons for departing from our findings.

Queensland Competition Authority (2020). p.5.

³⁹ Gladstone Area Water Board (2023). Mid-term Price Review, GAWB Submission, July.

Queensland Competition Authority (2023a). Subsequent Report, Gladstone Area Water Board Price Monitoring 2020-25, October, p.ii.

Based on our review, GAWB has demonstrated a sound customer consultation process in setting and explaining its final prices for 2020–21 and its annual price indexation adjustments thereafter. We are satisfied that GAWB has engaged with its customers in an open and transparent way.

Further information on this review can be found on the QCA's website.⁴¹

Due to the inclusion of a similar mid-term review provision in the Referral Notice for the 2025 Price Monitoring Investigation, GAWB expects the QCA will apply a similar approach at the 2028 Mid-term Review.

4.2 Customer Engagement

GAWB recognises that understanding customer and community concerns, priorities and preferences is integral to the success of its business. Stakeholder engagement is a consistent feature of GAWB's usual business activities, primarily via its established forums, annual customer updates and participating at local industry and community events.

Since 2020, GAWB's ongoing customer engagement has been centred around two annual activities - pricing updates and customer updates. This is a commitment that GAWB has made, and delivered upon, to keep its customers informed and provide them with an opportunity to discuss key issues relating to their bulk water services.

As outlined previously, GAWB's customer base is unique compared to other water utilities, comprising a small number of (mostly) large and sophisticated organisations. Engagement is therefore centred on the annual one-on-one update, and tailored communications throughout the year based on the customer's specific requirements.

Following the conclusion of the QCA's 2020 Price Monitoring Investigation and in June of each subsequent year, prior to the introduction of new prices, GAWB provides all industrial customers and GRC with a letter setting out:

- a comparison between GAWB's final prices by pricing zone and the indicative prices set out in the QCA's Final Report;
- the bulk water prices that would apply for the customer's delivery point/s;
- an estimate of the resultant increase in the customer's charges (based on an estimate of the customer's water charges); and
- an explanation of the drivers of the differences between GAWB's final prices and the QCA's basis for determining indicative prices.

In the second quarter of each financial year, customers are also offered an individual meeting to discuss key issues including:

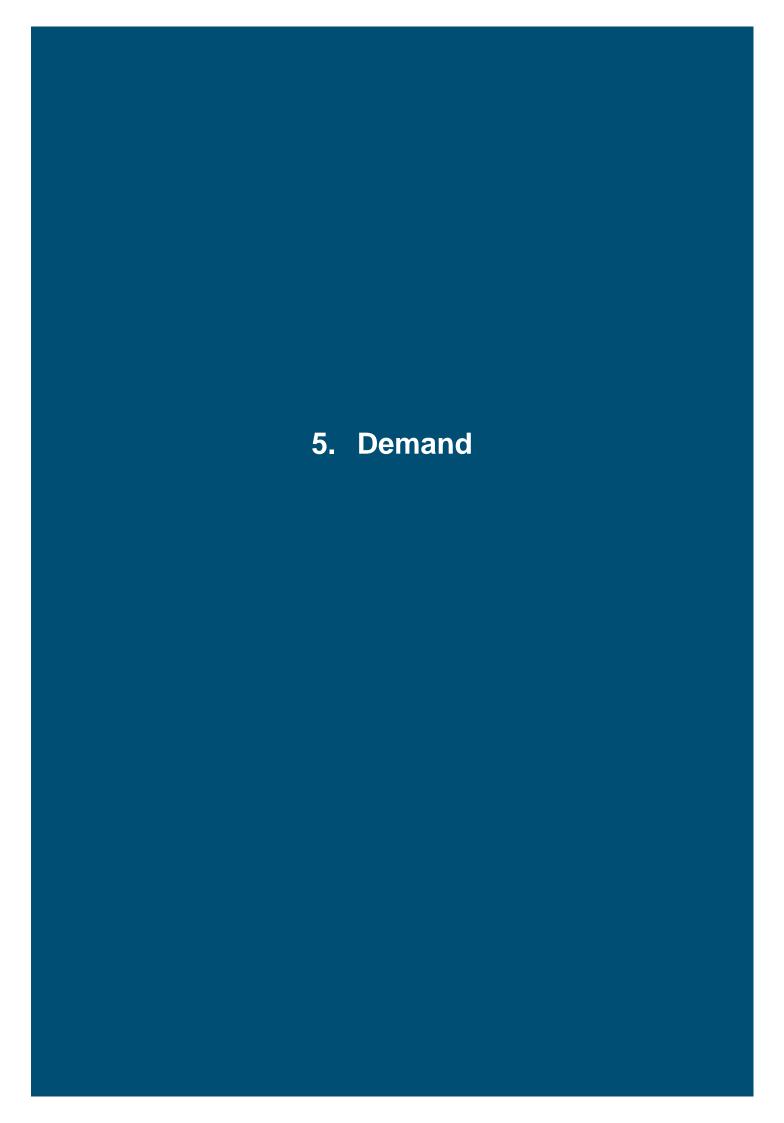
- GAWB's progress on the delivery of, and planning for, significant capital projects;
- GAWB's performance against the QCA's capital expenditure allowance for the preceding financial year;

⁴¹ https://www.qca.org.au/project/urban-bulk-water/gladstone-area-water-board/price-monitoring-2020-25/

- Awoonga Dam storage levels and drought management activities (if applicable); and
- other significant business activities e.g. Price Monitoring Investigations, Climate Change Strategy and updating of the state of any potential or existing LSA or water restrictions.

Individual meetings also provide customers with the opportunity to raise technical, commercial and contractual issues which can inform GAWB's future capital investment and operational activities. The most recent round of one-on-one customer meetings was concluded towards the end of 2023.

As it approached the 2025 Price Monitoring Investigation, GAWB originally anticipated engagement with its customers would occur prior to the lodgment of its submission, assuming the same development timeframe that has applied in the last two Price Monitoring Investigations (where GAWB was required to lodge its submission by 30 September in the last financial year of the relevant regulatory period). Given the accelerated timeframe for GAWB's lodgment (31 May 2023), it has not been feasible for GAWB to adopt a similar approach.



The demand forecast for the FY2026-30 regulatory period is based on GAWB's current understanding of:

- Reservation amounts for customers covered under existing commercial arrangements;
- Reservation amounts for new customers that are covered under water supply contracts, including those that are conditional; and
- Reservation amounts that have been allotted to potential customers that are, or will be, subject to a water supply proposal.

5.1 Water Demand

The demand forecast used in GAWB's submission to the 2020 Price Monitoring Investigation relied on a probabilistic forecast of demand, with a five-year demand forecast used to set prices adopting the median aggregate forecast value (i.e. a 50% probability of exceedance) for each year. The QCA found GAWB's proposed demand forecast for the FY2021-25 regulatory period was reasonable as they were based on the latest available information, historical outcomes or trends and advice from customers.⁴²

Subject to the terms of customers' contractual arrangements, there was potentially scope for customers to adjust their current reservations prior to the finalisation of prices to apply from 1 July 2020. Confirmation of each customer's water reservations for the FY2021-25 regulatory period was sought at the end of 2019-20. These updated reservations were used to set final prices from 1 July 2020.

As shown in Figure 5.1 below, actual annual volumes have been lower than the levels expected at the time of setting final prices in 2020, with a significant reduction seen from 2020-21. This is largely attributable to short- to medium-term changes in the operating characteristics of some of GAWB's customers, such as the operation of Callide Power Station. These circumstances are expected to change in mid-2024, with operational practices to start returning to prior levels.

⁴² Queensland Competition Authority (2020). p. 112.



Figure 5.1: Contracted and Metered Volumes - Actual and Forecast

5.2 Forecasting Methodology

As noted in Chapter 2, demand for water is expected to exceed GAWB's existing annual allocation from Awoonga Dam, due to an increased level of interest from the hydrogen and renewable energy sector.

To ensure the fair and consistent allotment of remaining available capacity from its water source(s) (currently Awoonga Dam) between entities seeking water supply (water seekers), GAWB has developed a Queuing Guideline (Source Capacity) (Queuing Guideline).⁴³ The Queuing Guideline is an internal document that sets out the process and criteria GAWB will apply to determine a water seeker's position in the queue for water supply, as well as when their position in the queue will be reviewed.

GAWB periodically determines Available Capacity (which is source capacity available for potential contracting) as the difference between Total Capacity and Committed Capacity where:

 Total Capacity is the total volume of water GAWB anticipates it can supply (assuming supply restrictions or localised infrastructure constraints are not an impediment, and taking into account the capacity of its water sources, volume of GAWB's water allocations,

⁴³ A public version of the Queuing Guideline is available on GAWB's website.

delivery network constraints, previous supply volumes, storage/network losses, environmental discharges and other matters considered relevant); and

 Committed Capacity is the total volume of water GAWB anticipates it will be required to supply (assuming existing customers take their water reservation, existing water supply contracts are renewed/extended unless that has not occurred a short period before expiry, customers supplied on standard terms are continued, conditional contracts become unconditional and rights/options to additional water are exercised).

Available Capacity is reassessed periodically or after certain material changes to Total or Committed Capacity.

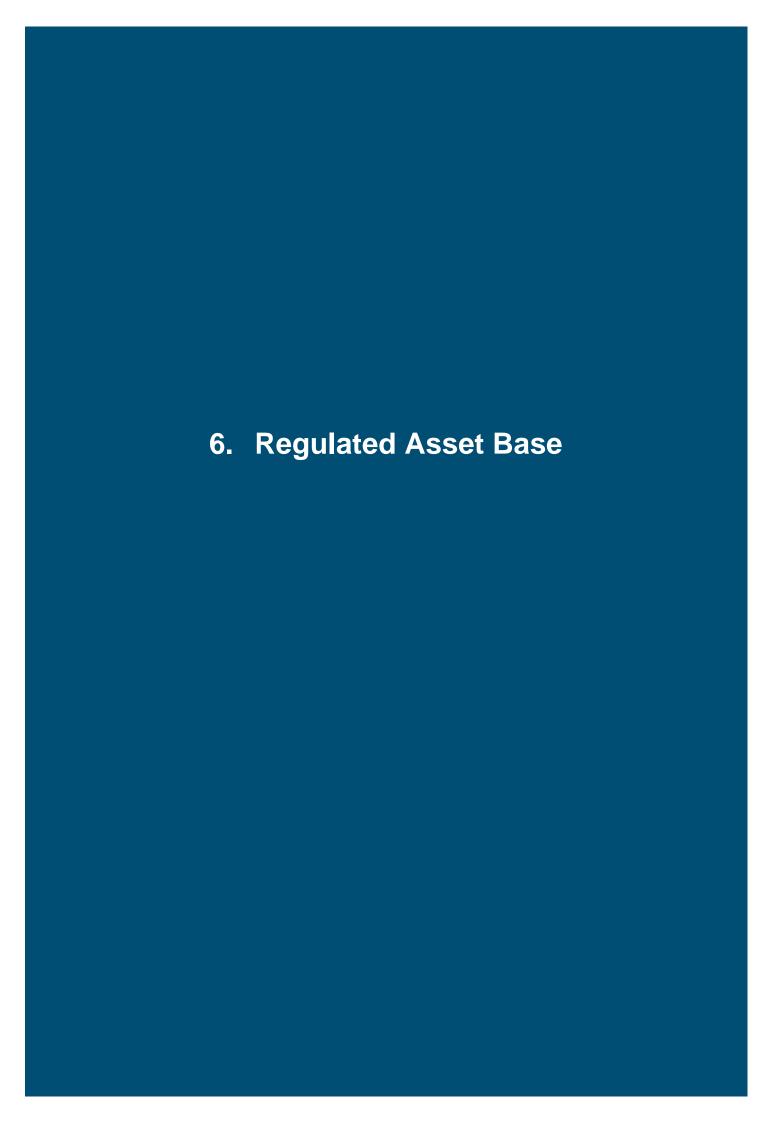
In June 2023, following the lifting of GAWB's LSA,⁴⁴ GAWB issued a general invitation to all existing customers and known potential customers requesting new or additional water supply to submit a water application. Since that time, GAWB has received and assessed several applications from water seekers in accordance with the Queuing Guideline. Where appropriate, those applications have resulted in Available Capacity being allotted and water supply proposals issued (where applicable) to water seekers with the intention of progressing the applications through to the execution of a signed water supply contract. Following the completion of this water application process, capacity at Awoonga Dam will be effectively fully allotted.

Due to the change in GAWB's operating environment, the forecasting methodology to identify demand for the FY2026-30 regulatory period is based on the processes associated with, and the outcomes of, the application of the Queuing Guideline. This process is broadly consistent with the methodology used in prior regulatory periods. It also represents "reasonably expected future demand", as provided in the Referral Notice for the purpose of setting Appropriate Prices.

GAWB intends to meet with each of its customers over the coming months to discuss their future demand requirements, having regard to their contractual commitments and operational plans.

The outcome of these discussions will be used to update the reservations used to set final prices from 1 July 2025.

Under GAWB's Drought Management Plan, whilst an LSA is in place, GAWB is unable to enter into new water supply contracts or increase reservations under existing commercial arrangements.
Refer: https://www.gawb.qld.gov.au/planning/drought-management-plan/



GAWB's RAB comprises all infrastructure used to deliver its regulated bulk water services, including Awoonga Dam, water treatment plants, pipelines and other infrastructure. The RAB is rolled-forward at the commencement of each new regulatory period for efficient capital expenditure, inflation, asset disposals and depreciation. GAWB has rolled-forward its RAB for the FY2021-25 regulatory period based on the approach previously applied by the QCA and in accordance with the terms of the Referral Notice.

This results in an opening RAB as at 1 July 2025 of \$716.97 million.⁴⁵

6.1 Methodology Applied

6.1.1 Referral Notice

The Referral Notice requires the following approach for the RAB.

- (a) The opening RAB as at 1 July 2020* is not to be optimised and have the remaining lives as used by the Authority in the Authority's Gladstone Area Water Board pricing monitoring 2020-2025 Final Report.
- (b) The opening RAB as of 1 July 2025 determined by:
 - i. Assessing the prudency and efficiency of capital expenditure from 1 July 2020 to 30 June 2025, based on an appropriate sample of capital projects.
 - ii. Rolling forward the RAB from 1 July 2020 to 30 June 2025, in accordance with the methodology previously applied by the Authority in the Authority's Gladstone Area Water Board price monitoring 2020-2025 Final Report, adjusted for any findings in (i) above.
 - iii. Adjusted for depreciation and actual inflation over the period.
- (c) The RAB for the period 1 July 2025 to 30 June 2030 forecast:
 - i. Including an appropriate allowance for prudent and efficient capital expenditure, based on an appropriate sample of capital projects, focusing on the projects with a material impact on the RAB in aggregate.

*Noting that for the 2019-20 year the capital expenditure used to determine the RAB will be adjusted to take into account GAWB's actual capital expenditure.

6.1.2 GAWB's Approach

GAWB's proposed RAB has been determined based on the above terms of the Referral Notice. In determining the opening RAB as at 1 July 2025, GAWB has applied the approach used by the QCA in its 2020 Final Report, which is consistent with the approach used in prior regulatory periods. This involves:⁴⁶

⁴⁵ This value excludes Curtis Island.

⁴⁶ Queensland Competition Authority (2020). p.74.

- establishing the opening value of the RAB at the beginning of the prior regulatory period (which is the current regulatory period);
- adding efficient capital expenditure incurred;
- indexing for inflation in asset values;
- removing redundant asset and assets sold (disposals); and
- depreciating the assets, using estimated asset lives.

Current Period Opening RAB

GAWB has updated the current period opening RAB as at 1 July 2020. This is necessary because some of those inputs as presented in the QCA's 2020 Final Report were based on forecasts for the last year of the prior regulatory period (2019-20). The key updates were as outlined in GAWB's submission to the QCA's 2023 Mid-term Review⁴⁷ and included actual capitalisation and asset disposals up to May 2020, along with inflation. A further update to the 2019-20 year has been done to capture actual asset capitalisation and asset disposals that occurred in June 2020 (which was not known at the time of setting final prices to apply from 1 July 2020). The following table shows the closing RAB as at 30 June 2020, which is the current period opening RAB as at 1 July 2020.

Table 6.1 Opening RAB 1 July 2020 (\$M) 1,2

Opening RAB as at 1 July 2019	557.28
Efficient capitalised expenditure	6.63
Disposals	(0.17)
Indexation	10.32
Depreciation	(14.59)
Closing RAB as at 30 June 2020 / Opening RAB 1 July 2020	559.48

- 1. This roll forward excludes values associated with the Curtis Island pricing zone.
- 2. Numbers may not add due to rounding.

Efficient Capital Expenditure

"Efficient capital expenditure incurred" represents the forecast capitalisation of completed projects during the regulatory period, based on the expected capitalisation date. Consistent with past practice, GAWB includes a return on the funds invested over the duration of the construction project IDC. GAWB conservatively calculates IDC for those projects with costs

⁴⁷ Gladstone Area Water Board (2023).

exceeding \$1 million. GAWB's approach to recognising and calculating IDC is consistent with the methodology previously endorsed by the QCA.⁴⁸

Capitalised expenditure over the FY2021-25 regulatory period is below the forecast included in bulk water prices. The contributing factors are discussed in more detail in Chapters 3 and 8.

Indexation

The indexation of the RAB over the current FY2021-25 regulatory period has been adjusted for actual inflation for 2020-21 to 2023-24. Actual inflation over this period has mostly been above the forecast applied in setting prices for the FY2021-25 regulatory period. Consistent with the QCA's approach (and as applied historically), GAWB uses the Brisbane All Groups CPI.

A forecast must be applied for the 2024-25 year of the current regulatory period. GAWB engaged Frontier Economics (Frontier) to forecast GAWB's escalation factors, including CPI, and have provided forecast inflation figures for the 2024-25 to 2029-30 period. Further detail on the approach used to forecast CPI is provided in Chapter 7. The actual and forecasts CPI applied in the RAB roll-forward are provided in Table 6-2.

Table 6.2 Forecast CPI

	2020-21	2021-22	2022-23	2023-24	2024-25
Forecast RAB Indexation	2.27	2.27	2.27	2.27	2.27
Actual RAB Indexation	1.72	6.01	7.42	3.42	3.20

6.1.3 RAB Roll-Forward

Based on the above, the roll-forward of GAWB's RAB for the FY2021-25 regulatory period is shown in Table 6.3. Values for the 2023-24 and 2024-25 years are based on current forecasts. This sets the opening RAB from 1 July 2025.

Queensland Competition Authority (2005). Gladstone Area Water Board, Investigation of Pricing Practices, Final Report, March, p.97.

Table 6.3 RAB Roll-Forward to 1 July 2025 (\$M) 1,2

	2020-21	2021-22	2022-23	2023-24	2024-25
Opening RAB	559.48	580.42	626.89	665.96	682.07
Accumulated Revenue Under Recovery (ARUR) ³	23.08	-	-	-	-
Actual/forecast efficient capitalised expenditure	4.99	26.94	9.21	10.60	31.55
Actual/forecast disposals	(2.14)	-	-	-	-
Indexation	10.03	35.22	46.71	22.94	22.33
Depreciation	(15.02)	(15.68)	(16.86)	(17.43)	(18.98)
Closing RAB	580.42	626.89	665.96	682.07	716.97

^{1.} This roll forward excludes values associated with the Curtis Island pricing zone.

The opening RAB from 1 July 2025 is therefore \$716.97 million.⁴⁹

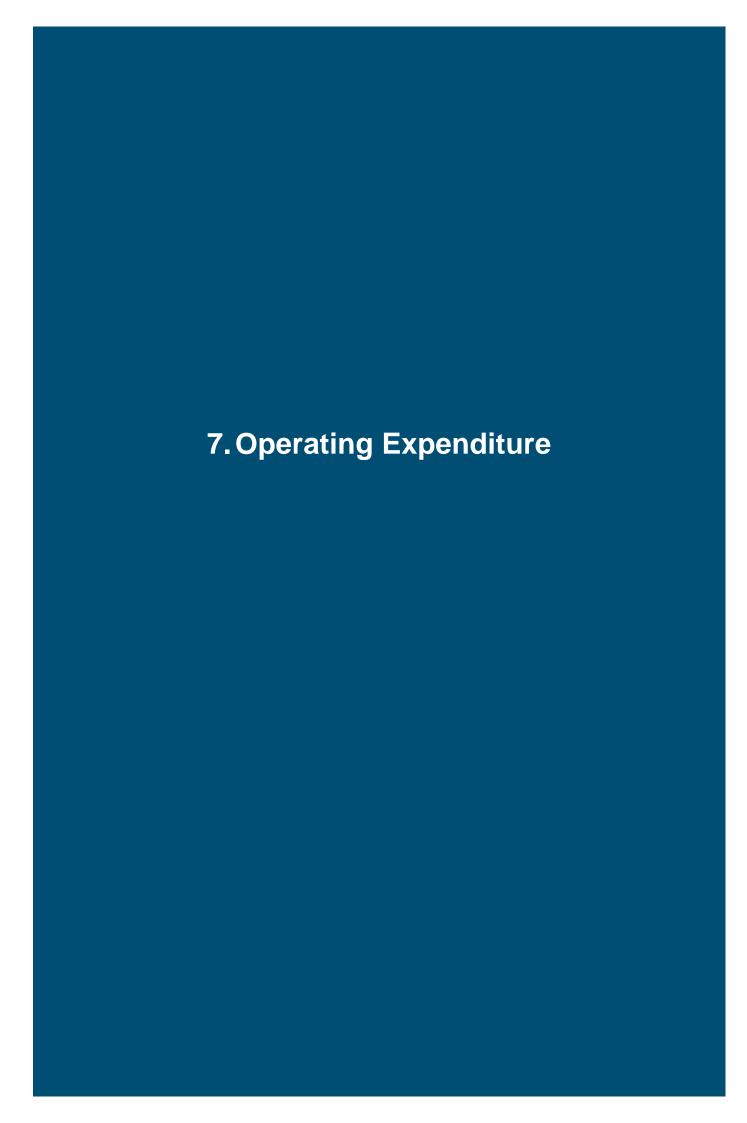
This opening RAB from 1 July 2025 will be updated for actual efficient capitalised expenditure and asset disposals for 2023-24 and 2024-25 and actual CPI for 2024-25. A final forecast RAB roll-forward will be established just prior to the finalisation of prices to apply from 1 July 2025.

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^{2.} Numbers may not add due to rounding.

^{3.} This amount is the capitalised component of the ARUR associated with the raising of the Awoonga Dam Wall.

⁴⁹ This is exclusive of Curtis Island.



GAWB's operating expenditure forecast for the FY2026-30 regulatory period has been developed using the base-step-trend approach. The foundation for this forecast (i.e. the base year) is 2022-23 (as the most recently completed financial year of expenditure). GAWB's actual expenditure in that year is below the allowance found to be prudent and efficient by the QCA in the 2020 Price Monitoring Investigation.

GAWB is forecasting a material increase in its operating expenditure for the FY2026-30 regulatory period. This reflects significant cost pressures across the business as well as the expansion in the scale and scope of GAWB's activities to continue to meet the needs of its current and future customers. These increases are already being experienced in 2023-24 and (forecast) 2024-25, with GAWB bearing the increase above the forecast used to set prices in the current regulatory period.

The total forecast operating expenditure for the FY2026-30 regulatory period is \$244.72 million. This will position GAWB to respond to, and manage, the opportunities and challenges ahead as it supports current and future growth in the Gladstone region. GAWB will need to continue to actively manage and monitor risks impacting its operating expenditure (such as further increases in electricity prices) while seeking to drive efficiencies where possible.

7.1 Referral Notice

For the purpose of forecasting operating expenditure, the relevant aspects of the Referral Notice with which GAWB must comply are as follows:

- The definition of Allowable Costs, which includes the following operating expenditure costs:
 - "(a) Prudent and efficient operational, maintenance and administrative costs, including allowances for working capital and tax, where applicable.
 - (b) Forecast expenditure for prudent and efficient operational, maintenance and administrative costs, assessed using a base-step-trend approach, focussing on necessary step changes of expenditure expected to occur during the period. Baseyear operating expenditures are to be escalated using Forecast Inflation. Calculated considering issues of materiality between forecast operating and maintenance expenditure in aggregate.
 - (d) Prudent and efficient costs associated with catchment management.
 - (e) Prudent and efficient recreational facilities costs.
 - (i) Costs required to meet regulatory obligations and deliver agreed service levels taking into consideration the strategic and operational plans approved by the responsible Minister under the Water Act and the Water Supply Act."⁵⁰
- The definition of Forecast Inflation, which is: "Inflation based on the methodology outlined in the QCA's Inflation Forecasting Position Paper."

⁵⁰ Referral Notice, p.3.

7.2 Methodology

7.2.1 Base-step-trend Approach

GAWB has developed its forecast operating expenditure for the FY2026-30 regulatory period using the base-step-trend approach. Application of this methodology is required by the Referral Notice and is consistent with general trends in economic regulation, including in the water sector. The QCA also commented that GAWB should consider applying this method in its 2020 Final Report.⁵¹ This is the first time that the base-step-trend approach has been applied by GAWB.

Transitioning to the base-step-trend approach at the current time has some challenges. As the QCA comments in its Final Report for Seqwater's FY2023-26 bulk water price review, actual operating expenditure is the starting point for establishing prudent and efficient base year expenditure if it "represents a typical year for the forecast regulatory period." ⁵²

As outlined in Chapter 3, GAWB is undertaking significant investments in the FY2026-30 regulatory period in a fast-evolving environment, including the initial augmentations necessary to accommodate demand for the new hydrogen industry which is expected to represent another step-change in Gladstone's investment cycle. At the same time, GAWB continues to experience significant cost pressures, impacting the existing network and business-as-usual activities. Combined, these drivers result in a significant step-up in GAWB's operating expenditure. As shown in section 7.3, these trends have become more evident in the second half of the current regulatory period and are expected to continue into the FY2026-30 regulatory period.

Despite these challenges, the base-step-trend approach serves as a robust and transparent approach for forecasting GAWB's prudent and efficient operating expenditure. GAWB has implemented the base-step-trend forecast consistent with the standard methodology and having regard to the approach applied in the QCA's review of Seqwater's bulk water prices for the FY2023-26 regulatory period. This involves the following key steps.

- 1. Determine a prudent and efficient base year of operating expenditure.
 - The starting point for this is revealed expenditure for the most recently completed financial year, which is 2022-23.
 - Adjustments are then made for non-recurrent expenditure and/or any normally recurring items of expenditure that were not incurred in the base year.
- Identify prudent and efficient step changes. These must meet strict criteria established by the QCA. GAWB has applied the same criteria as applied in the QCA's review of Seqwater, namely:
 - New or changed obligation: are necessary to fulfil new, or changed, binding statutory or regulatory obligations;

Dueensland Competition Authority (2020). p.20.

Queensland Competition Authority (2022). Final Report, Seqwater Bulk Water Price Review 2022-26, March, p.16.

- Meets customer and/or community expectations: are reasonably required to achieve an outcome that is explicitly endorsed by customers (for example, specific reliability outcomes) or broadly accepted changes in community expectations in relation to corporate responsibility (such as commitment to climate change mitigation);
- No double counting: are not already funded through other components of other approved allowances (to avoid double counting of costs);
- Cyclical activity: represent cyclical activities that are not within annual business-asusual budgets; and
- Materiality: are of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.⁵³
- 3. Apply trend factors that may account for demand or output growth, and input cost escalation.
- 4. Determine if and how incentives need to be provided for efficiency improvements.

In assessing efficiency, regulators may also have regard to relevant benchmarking against other utilities. As GAWB has submitted in previous price monitoring investigations, and as remains the case, GAWB's business is unique compared to other bulk water utilities due to the composition of its customer base, which is dominated by a small number of large industrial customers. This precludes any meaningful benchmarking analysis. GAWB also notes that the QCA did not apply benchmarking in Segwater's most recent bulk water price review.

GAWB's base year does not include costs that have been capitalised. It has also ensured that its step changes do not include any costs that are forecast to be capitalised. The main categories in which this can occur are labour costs and contractors and professional services.

Consistent with the terms of the Referral Notice, GAWB has excluded any costs associated with the FGP.

7.3 Current Period Operating Expenditure

Unlike capital expenditure, the QCA does not undertake an ex-post review of current period operating expenditure. The main reason for this is because GAWB is financially fully exposed to variations in actual expenditure relative to the forecast that is used to set bulk water prices in the current regulatory period. However, GAWB recognises that this information provides transparency to customers, as well as context for base year expenditure.

GAWB's current and forecast operating expenditure for the FY2021-25 regulatory period is shown in Figure 7.1 (the 2023-24 and 2024-25 years represents GAWB's current budgeted expenditure). This is compared to the QCA's recommended operating expenditure, net of the

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⁵³ Queensland Competition Authority (2022). p.17.

1% per annum efficiency factor,⁵⁴ and escalated using the rates that were applied in setting bulk water prices from 1 July 2020.

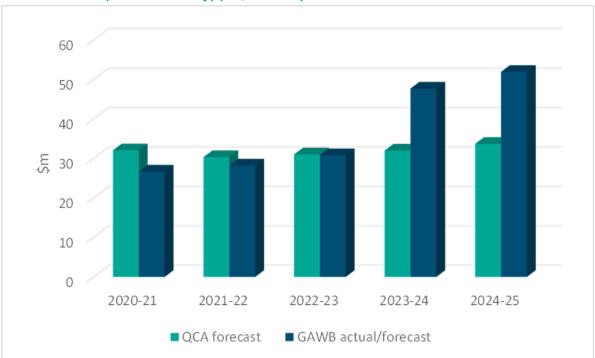


Figure 7.1 Current Period Operating Expenditure – GAWB (actual/forecast) Compared to QCA's Forecast (net of efficiency) (\$M, nominal)¹

1. The scope of operating expenditure as reflected in this chart is consistent with the definition of Allowable Costs as contained in the Referral Notice.

The profile of GAWB's actual operating expenditure over the current period illustrates the challenging operating environment discussed in Chapter 3. In the early years of the current regulatory period business activity was more materially impacted by COVID-19, resulting in an underspend of operating expenditure. Since then, expenditure has been increasing. This has been driven by a number of factors, including transitioning to 'business-as-usual' following COVID-19, increases in materials and operating costs and increased business activity associated with new customer requests and supporting the emerging hydrogen industry.

A significant step-change in expenditure is forecast to occur in 2023-24 and 2024-25. GAWB must bear the additional costs above the allowance built into prices in those years, with actual price changes limited to annual escalation for changes in the CPI. Many of the drivers of cost increases are forecast to persist into the next regulatory period and are reflected in proposed step changes, which are explained in section 7.5.

As noted above, it is also important to note that the QCA's recommended operating expenditure for the FY2021-25 regulatory period has been escalated using the escalation factors applied by GAWB at the time of setting its final prices from 1 July 2020. Those factors were based on the QCA's findings published in its 2020 Final Report, subject to variations

This efficiency factor is applied to GAWB's controllable costs only.

described by GAWB in its 2023 Mid-term Review submission, which is published on the QCA's website.⁵⁵ Actual CPI has materially exceeded that forecast and if the QCA's allowance was escalated using actual CPI, it would be above the levels reflected in Figure 7.1.

7.4 Base Year Operating Expenditure

7.4.1 Approach

The proposed base year is 2022-23, which is the most recently completed financial year. GAWB considers actual 2022-23 expenditure to be an appropriate baseline for prudent and efficient operating expenditure in accordance with the base-step-trend methodology.

GAWB's total operating expenditure in that year (before adjustments) was \$30.85 million (\$2022-23). The QCA's final (recommended) allowance for that year was \$31.04 million based on the allowance used to set final prices from 1 July 2020, net of the efficiency target and escalated using the final escalation factors.

GAWB has reviewed its actual operating expenditure in the base year and removed items of non-recurrent expenditure, which are listed below. It has also added back two items of recurrent expenditure:

- motor vehicle lease costs, which are not reflected in actual 2022-23 operating expenditure due to a change in accounting standards;
- the deferral of maintenance activities due to resource constraints.

Each of these adjustments is explained below.

Motor Vehicle Lease Costs

Forecast operating expenditure for the FY2021-25 regulatory period assessed by the QCA included an allowance for motor vehicle lease costs in the Operations category. In 2019-20, GAWB implemented a change in accounting policy, which was the application of AASB 16 Leases. This superseded AASB 117 Leases and eliminated the classification of Operating and Finance Leases.

The change resulted in lease costs being removed from the Operations cost category, with most leases now recognised on the balance sheet as a right-of-use asset with a corresponding lease liability. Therefore, while this is still expenditure incurred by GAWB, it is not captured in actual 2022-23 operating expenditure based on GAWB's standard general ledger categories. If these costs are not captured in forecast operating expenditure, they are not otherwise able to be recovered by GAWB.

The applicable adjustment made to the base year has been calculated as the sum of actual amortisation (equivalent to the principal amount) and interest expense on all motor vehicle leases in 2022-23, excluding any leases that were capitalised.

https://www.qca.org.au/project/urban-bulk-water/gladstone-area-water-board/price-monitoring-2020-25/

Deferred Maintenance

Preventative maintenance is one area where GAWB's actual 2022-23 base year expenditure is not representative of ongoing recurrent expenditure.

As will be highlighted further below, in the current regulatory period GAWB has experienced challenges in recruiting and retaining staff, which reflects the very tight market for labour in the Gladstone region. For the same reason, GAWB has experienced high staff turnover, particularly in 2022-23, which impacted its ability to complete the preventative maintenance program.

GAWB's budgeted preventative maintenance expenditure is derived from maintenance schedules in its Asset Management System. However, resource constraints in 2022-23 resulted in the deferral of some preventative maintenance activities as staff were redeployed to higher priority breakdowns or corrective maintenance activities. While GAWB will typically try and bring in short-term labour hire to cover staff shortages, this is not always feasible, depending on the nature of the work involved and the availability of suitably qualified candidates in the market (noting the tightness of that market in 2022-23).

GAWB has identified \$0.17 million in expenditure scheduled for 2022-23 (comprising four preventative maintenance activities) that is not reflected in actual expenditure in that year. This was primarily due to a need to defer those activities to 2023-24 due to various matters such as resourcing constraints.

It is recognised that in any year, actual maintenance activity can vary from budget for a number of reasons. However, GAWB considers that the circumstances it faced in 2022-23 were not representative of a 'typical' year. Since then, there has been an improvement in staff retention, which is at least partly attributable to the implementation of recommendations for the organisation-wide remuneration and benefits review in July 2023 (refer section 7.5.1). This in turn has seen an improvement in its ability to deliver its preventative maintenance activities as budgeted.

GAWB is therefore proposing to add back an amount of \$0.17 million to the base year. This does not represent the full amount of the underspend in that year however GAWB has sought to limit the adjustment to the more material activities.

Summary of Adjustments

All adjustments made to the 2022-23 base year expenditure are summarised in Table 7.1 below.

Table 7.1 Adjustments to Actual 2022-23 Expenditure¹

Item	Adjustment (\$2022-23)	Comments
Updates to Capital Project Governance Frameworks	(120,642)	Costs associated with updates and improvements to GAWB's capital project governance frameworks. The amount represents 50% of expenditure in that year, as there will be a need to continue to incur expenditure as part of continuous improvement.
Risk and Safety ICT system implementation costs	(139,631)	Implementation costs associated with the acquisition of GAWB's Risk and Compliance software from SAI Global 360.
50th birthday celebration	(201,760)	Costs incurred as part of GAWB's 50 th birthday celebrations, which included corporate and community activities and events.
SOCI risk review	(111,203)	Costs associated with a Security of Critical Infrastructure (SOCI) review by KPMG. Where relevant, ongoing expenditure incurred in response to this review has been captured in step changes.
Motor vehicle lease costs	315,824	Expenditure relating to motor vehicle leases that are now amortised under AASB16.
Deferred preventative maintenance	170,000	Primarily reflects expenditure on preventative maintenance planned for 2022-23 but where delivery was impacted by significant resource constraints. This meant that actual 2022-23 expenditure was not representative of ongoing preventative maintenance.
Net adjustment to base year	(87,412)	

^{1.} Numbers may not add due to rounding.

7.4.2 Proposed Base Year Expenditure

GAWB's adjusted base year expenditure, and a comparison against the QCA's allowance, is presented in Table 7.2.

Table 7.2 GAWB's Adjusted 2022-23 Base Year Expenditure (\$2022-23)1

Difference between GAWB's adjusted base year expenditure and the QCA allowance	(275,564)
Adjusted base year expenditure	30,763,392
Net adjustments to GAWB's actual expenditure	(87,412)
GAWB's actual expenditure, before adjustments	30,850,804
QCA allowance	31,038,956

^{1.} Numbers may not add due to rounding.

GAWB's adjusted base year expenditure is \$0.28 million less than the allowance recommended as prudent and efficient by the QCA in the 2020 Price Monitoring Investigation. In its 2022 Final Report for Seqwater, the QCA stated that:

If actual opex is ... lower than the approved allowance, we accept this year as the prudent and efficient revealed opex and use the most recently completed financial year to establish the base year.⁵⁶

GAWB submits that its adjusted 2022-23 expenditure of \$30,76 million (\$2022-23) should be accepted as prudent and efficient base year expenditure.

7.5 Step Changes

Nine step changes are proposed for the FY2026-30 regulatory period. GAWB notes that Seqwater proposed twelve step changes in its submission to the FY2022-26 bulk water price review, with different drivers.⁵⁷ GAWB's proposed step changes are summarised in the table below, including total forecast expenditure for the five-year period.

The relevant QCA step change criteria are also presented and summarised in Table 7.3. One of the QCA's criteria is that there should be no double counting of costs, and in proposing each step change, GAWB has been careful to ensure that no double counting has occurred. This is seen as a necessary condition that must be satisfied for all step changes and so it has not been identified separately as a step change criterion. GAWB has also only sought to propose material step changes that cannot be otherwise funded within the business, noting that this is the primary (or only) criterion for most of the step changes.

The step changes have been presented in 2022-23 dollars to enable direct comparison with the base year. These costs are then escalated, along with the base year, using the proposed weighted average escalators (refer section 7.6.2).

Queensland Competition Authority (2022). p.16.

https://www.qca.org.au/project/urban-bulk-water/seqwater-bulk-water-investigations/seqwater-bulk-water-prices-2022-26/

Table 7.3 Summary of Step Changes¹

Step change	Relevant step change criterion/criteria ²	Total forecast expenditure FY2026-30 (\$2022-23)
Labour	Materiality	32,587,969
Electricity	Materiality	5,406,413
ICT	Customer and community expectations (e.g. cyber security) Cyclical Materiality	4,037,689
Maintenance	Cyclical Materiality	1,971,564
Hatchery	New or changed obligation Materiality	1,376,796
Insurance	Materiality	5,057,336
Chemicals	Materiality	1,385,904
QCA price investigations	Cyclical Materiality	3,296,271
Review of tariff structure	Cyclical Materiality	746,815
TOTAL		55,866,757

^{1.} Numbers may not add due to rounding.

Each step change is summarised below. Individual business cases have been prepared for each step change to further explain the basis for each, along with the approach used to develop the expenditure forecast. The business cases will be made available to the QCA and its consultant, along with relevant supporting documentation (as requested).

7.5.1 Labour

Drivers

There are two main drivers of GAWB's increase in labour costs:

- the implementation of a new remuneration and benefits strategy from 1 July 2023, in response to challenges in recruiting and retaining staff; and
- additional staff members in view of the changing and increasingly complex business and operating environment.

These are described below.

^{2.} As defined in section 7.2.1.

Remuneration and Benefits

As outlined in Chapter 3, GAWB has faced numerous challenges in the current regulatory period.

These difficulties have been exacerbated following the onset of the COVID-19 pandemic, coupled with a nation-wide infrastructure boom and a rapid ramp-up of industrial development in the Gladstone region. This has also meant that GAWB has carried higher-than-normal vacancy rates in the current regulatory period, including in the base year.

In response to these challenges and the need for GAWB to compete in the tight regional labour market, a remuneration and benefits review was completed in 2023. This was informed by independent advice from Mercer, who also provides GAWB with ongoing market benchmarking of remuneration on an annual basis. Mercer made recommendations regarding remuneration and benefits that would improve GAWB's ability to compete in the regional market. It concluded the most relevant comparator markets within which GAWB must compete for resources, are the General market and the Resources, Construction and Engineering market.

Following the completion of this review, in March 2023 GAWB's Board approved a new remuneration and benefits strategy that would assist in attracting and retaining a workforce capable of achieving its strategic objectives and operational obligations. Since these recommendations were implemented, from 1 July 2023 (i.e., following the base year), GAWB has subsequently seen some positive outcomes in terms of an improvement in its ability to fill roles, including a reduction in the time taken for recruitment.

It is also important to note that these changes enabled a degree of 'catch up' with current market conditions. The extent to which GAWB's remuneration is able to keep pace with the market over the FY2026-30 regulatory period is a separate issue, which is addressed as part of the escalation rates (refer section 7.6.2).

Resourcing

In response to the effects of the tight labour market and the requirements of GAWB's future work program GAWB has identified the additional capability (and where applicable additional resourcing) necessary to position the business for its current and future operating environment. This includes being able to effectively respond to the potential growth from new hydrogen customers in a timely and efficient manner. This means a step-up in the risks and complexity faced by the business, spanning a range of issues such as allocating capacity, engaging and negotiating with customers, planning and developing new infrastructure and integrating new assets into its network and operations.

Some new roles are required to ensure that GAWB can continue to meet its obligations and maintain an appropriate standard of service to existing customers. GAWB is also seeking to improve succession planning and build future resourcing capability from within the business via traineeships and apprenticeships. This approach will also be beneficial for providing future employment opportunities for young people in the Gladstone region.

The majority of the roles included in this step change have already been filled and the costs therefore reflect actual remuneration being paid. GAWB is therefore already incurring costs that are not reflected in the allowance used to set bulk water prices in the current FY2021-25 regulatory period.

Summary of Labour Step Change

The proposed step change for the forecast increase in labour costs is provided below. It does not allow for future wage price growth as this is addressed in the escalation factors (see section 7.6.2).

Table 7.4 Labour Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
5,937,791	6,662,545	6,662,545	6,662,545	6,662,545

This step change is considered to meet the QCA's materiality criterion because the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

7.5.2 Electricity

Drivers

GAWB procures electricity for each of its sites (e.g., a water treatment plant, pump station, office building) via either:

- a contestable market contract, where the retailer is selected based on the most competitive market offer at the time of contracting; or
- a standard non-market retail contract with Ergon Retail.

GAWB has developed a whole-of-business electricity cost forecasting model that has been used to forecast its electricity costs by site. To inform both the re-contracting decision and the forecast total electricity costs beyond the contracted period, GAWB procured an independent expert report from ACIL Allen on the wholesale electricity market outlook to 2029-30, which will be made available to the QCA and its consultant.

GAWB has also reviewed all sites to ensure that they are on the most appropriate and lowest cost retail and network tariffs for which the site is eligible.

Overall, GAWB is forecasting a step increase in electricity costs from the 2022-23 base year, which is driven by the forecast increases in both cost inputs and total electricity usage. Cost increases from the base year include all the major inputs, namely electricity wholesale (and subsequently retail) costs, renewable energy certificate costs and Ergon Energy Corporation Limited's (Ergon Network) network charges.

A brief summary of the approach used to forecast electricity consumption and costs is provided below.

Electricity Consumption

Historical data provides the basis for understanding the forecast peak and off-peak volumes for the contestable market sites. Electricity consumption has been forecast on a monthly basis using the latest available monthly consumption data from the previous 12 months, adjusted where there has been an identified need due to expected changes to future requirements on a site-by-site basis. For example, reductions in expected electricity consumption required to

be purchased from the grid following the installation and operation of the Awoonga Dam Solar Installation is reflected in the forecast, together with the impact of rooftop solar at the Yarwun Water Treatment Plant and the Gladstone Water Treatment Plant.

There will be a material increase in electricity demand in the network upon the commissioning of additional pump capacity to service new demand from hydrogen customers as well as expected increases in demand for water due to changes in the operating characteristics of some existing customers.

Based on this profile, GAWB's demand for electricity remains relatively flat up to 2027-28. It then materially increases due to new network and supporting infrastructure (e.g. pumps) coming online to support new connections in the Northern Industrial Zone.

Retail Costs

GAWB has applied actual retail electricity rates for the period contracted, and forecast rates for un-contracted years based on either the visible market (where available) or ACIL Allen's stochastic analysis.

The National Electricity Market has experienced significant volatility in electricity wholesale (and retail) costs in recent years due to a range of factors. The risk of volatility is expected to continue through the next regulatory period (and beyond).

While the impacts of wholesale electricity cost volatility can be controlled to some extent, there is aways a risk-managed balance between cost certainty (which risks locking in higher contract prices than might otherwise be available in future in a falling market) and leaving open opportunities for value in future contracting (which risks being exposed to higher prices at the time a new contract is required). This is achieved through monitoring the market and the selection of retail contract terms in consideration of the information available at the time of contracting.

Network Costs

Network tariffs have been forecast for the two contract types as follows:

Contestable market contracts:

- Applies Ergon Network's approved pricing proposal for 2024-25⁵⁸; and
- Applies Ergon Network's proposed network tariffs for FY2026-30 as submitted to the AER in January 2024⁵⁹ (and applying assumptions regarding future network tariff eligibility).

https://www.aer.gov.au/industry/networks/pricing-proposals/ergon-energy-2024-25-pricing-proposal {Accessed 9 May 2024}

https://www.aer.gov.au/industry/registers/determinations/ergon-energy-determination-2025-30 Accessed {9 May 2024}

Non-market retail contracts:

 Applies Ergon Network's and Energex Corporation Limited's (Energex) proposed network tariffs for FY2026-30 as submitted to the AER in January 2024^{60 61} to build up the forecast future (bundled) retail tariff rates.

It is noted that the final decisions for the network tariffs to be applied by Ergon Network and Energex for the FY2026-30 period are not due for release by the AER until April 2025.

For large businesses connected to the low voltage network, ⁶² Ergon Network has forecast network prices to increase on average by 7.1% annually over the FY2026-30 regulatory period. ⁶³

GAWB will monitor the market for opportunities to re-contract for future periods at an appropriate time during the contract term.

Forecast Outcomes

The resulting profile of forecast electricity costs shows an increase in costs in 2025-26 compared to the base year primarily as a result of the increased costs under the new market contract for the contestable sites as well as increasing non-market retail tariffs and network tariffs. A small increase in forecast electricity costs occurs in 2026-27 with costs increasing significantly after 2026-27. The latter increase is due primarily to forecast increased usage (including to service demand from new customers), as well as projected increases in line with Ergon Network's forecast increases in network tariffs, and forecast changes in wholesale electricity prices.

Summary of Electricity Step Change

The proposed step change for the forecast increase in electricity costs is provided below.

Table 7.5 Electricity Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
407,633	419,866	925,719	1,416,394	2,236,801

This step change is considered to meet the QCA's materiality criterion, as the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

https://www.aer.gov.au/industry/registers/determinations/ergon-energy-determination-2025-30 {Accessed 9 May 2024}

https://www.aer.gov.au/industry/registers/determinations/energex-determination-2025-30 {Accessed 9 May 2024}

Note that GAWB also has sites on high voltage and sub-transmission tariffs but GAWB has been unable to source similar forecasts from Ergon Network for those tariff types.

Ergon Energy Corporation Ltd (2024). Overview – Ergon Energy Network Regulatory Proposal for 2025-30.

7.5.3 Information and Communication Technology

Drivers

ICT is typically one of the more dynamic expenditure categories for a regulated business (and businesses in general), as they seek to keep pace with constantly evolving technology, address new risks (such as cyber security) and implement digital solutions that can improve all aspects of business operations.

GAWB's ICT expenditure is underpinned by the ICT Strategic Plan in place at that time. The FY2019-24 Strategic Plan sets out the framework for GAWB's digital transformation, utilising technologies to create new, or modify existing, business processes and customer experiences to meet changing business and market requirements. It included, but was not limited to, the staged implementation of a managed (or Cloud-based) services model and has resulted in expenditure that was formerly categorised as capital (reflecting investments in in-house systems and infrastructure) now being captured as operating expenditure.

GAWB's ICT Strategic Plan FY2024-29 was approved by the Board in December 2023. The ICT Strategy 2024-2029 Action Plan was subsequently approved by the Board in April 2024, and details the activities that will support the strategy and GAWB's commitment to prudently and efficiently use technologies to support, improve, secure, and automate selected processes.

The updated strategy and action plan have been set in the context of an increased level of recognition around the value of data and information, the operational and reputational impacts of cyber security events, an increased focus on Supervisory Control and Data Acquisition (SCADA) and automation services, and recognition of the capability uplift needed to sustain and continuously improve the efficient use of technology. Consideration has also been given to the Queensland Government Enterprise Architecture and the Queensland Government Digital Action plan as part of the Digital Economy Strategy.

The main drivers of the step change for GAWB's ICT expenditure are:

- increases in ICT and operational technology (OT) system support, which includes licensing and hosting fees for GAWB's new Cloud-based Enterprise Resource Planning system;
- increases in costs for Cloud-based services, including further cyber security remediation and improvement activities; and
- increased communications costs associated with new employees (as outlined in section 7.5.1).

Summary of ICT Step Change

The step change for the forecast increase in ICT costs is provided below.

Table 7.6 ICT step change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
807,538	807,538	807,538	807,538	807,538

This step change is considered to meet three of the QCA's step change criteria:

- are reasonably required to achieve an outcome that is explicitly endorsed by customers
 or broadly accepted changes in community expectations in relation to corporate
 responsibility this primarily relates to expenditure on cyber security;
- represent cyclical activities that are not within annual business-as-usual budgets; and
- the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

7.5.4 Maintenance

There are two key components to the step change in maintenance costs, being:

- major cyclical expenditure the Awoonga Dam Embankment and Spillway Drain Clean;
 and
- a necessary increase in maintenance expenditure from the base year to implement improvements that will enable GAWB to better manage its risks and make informed decisions, including between capital and operating expenditure solutions.

GAWB has not otherwise proposed any uplift in maintenance expenditure for new assets that are forecast to be commissioned in the FY2026-30 regulatory period. Those costs must be managed within the final operating expenditure allowance.

Awoonga Dam Embankment and Spillway Drain Clean

Periodically GAWB must undertake an embankment and spillway drain clean at Awoonga Dam. This is a major preventative maintenance activity, with GAWB required to maintain the drains on a regular basis to ensure they continue to function as designed and enable GAWB to comply with dam safety conditions enforced by the Dam Safety Regulator.⁶⁴

The current approach involves periodically engaging a contractor to flush, clean and inspect the drain holes. There are drain holes in the gallery as well as the spillway face that need to be flushed. Results of the contractor's cleaning and inspection are presented in a report to GAWB.

The most recent clean was completed in 2021. As part of this work, the contractor made a recommendation as to further remediation work that is necessary to maintain the effectiveness of the drainage system. This recommendation was also noted in GAWB's subsequent twenty-year dam safety review of Awoonga Dam, which was completed in 2022. It concluded that given the criticality of the drainage system to dam safety, the remediation work needs to be addressed as soon as practicable.⁶⁵

Due to the importance of this work to maintain dam safety, and in accordance with the recommendations, GAWB is planning to undertake this work in 2025-26. The budget of \$575,000 is based on the final cost of the most recently completed works. Given the nature of

⁶⁴ Currently the Chief Executive of DRDMW.

⁶⁵ Stantec Australia Pty Ltd (2022). Awoonga Dam Safety Review 2022, Final Report, August.

the work involved, particularly in accessing the spillway drain holes (including the safety issues), GAWB anticipates that it will incur similar costs to the previous project. The budget also reflects the increases in contractor rates for maintenance and construction activities that GAWB has experienced, which have been in the vicinity of 30% in recent years.

Improvements to Maintenance Practices

As GAWB has matured and evolved as a business, management has been working on several strategic initiatives to modernise and enhance the way it manages its assets, including maintenance practices. This has occurred under an integrated program of work called the Network Reform Program. One of the drivers of this program is to address identified data gaps that will assist GAWB to make better decisions regarding future maintenance and capital expenditure, including optimising the trade-off between the two. This activity responds directly to comments made by the QCA's consultant, KPMG, in the 2020 Price Monitoring Investigation as noted by the QCA, including perceptions of:

...a potential bias toward replacement over refurbishment/maintenance on the basis of risk, rather than asset performance and condition. KPMG recommended that GAWB undertake more condition assessments to justify replacement and actively explore non-replacement options...⁶⁶

Over time, the Network Reform Program is expected to result in some maintenance savings and more prudent and efficient capital investment decisions.

The key initiatives that are reflected in the forecast budget for the FY2026-30 regulatory period include the following.

- Condition assessments. GAWB is planning a significant increase in asset condition
 assessments to provide input into the data integrity of GAWB's Lifecycle Maintenance
 Plans (LCMPs). This will enable the business to make more informed business decisions,
 including the trade-off between maintenance and renewal. This is in direct response to
 concerns expressed by the QCA (and its consultant) as to whether decisions are based
 on asset performance and condition.
- Asset criticality. While understanding asset criticality and risk has always been important, it became even more important following COVID-19. GAWB began experiencing issues with limited availability of spare parts and significantly longer procurement lead times for items that had previously been readily and quickly available. This ongoing situation increases delivery risk in the event of asset failure. GAWB is therefore implementing a process for undertaking asset criticality reviews and analysis to better understand how maintenance strategies should be structured to manage risk.
- Pipeline and easement management. Due to population growth and forecast
 investment in the region, an increased level of detail is required in the management of
 easements. A multi-year program of works will be undertaken to better understand the
 issues that need to be addressed and to implement a comprehensive plan to address
 them, to ensure that GAWB has well-managed easements that allow for appropriate

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⁶⁶ Queensland Competition Authority (2020). p.60.

access for inspections, maintenance and renewals and to improve its longer term planning activities for the management of the network.

• Manuals and procedures. GAWB has recently completed an update of its Network Operations and Maintenance manuals. Additional work is required to ensure that there is a complete suite of documents encompassing all aspects of Network Operations and Maintenance. It is currently planned to be completed in 2025-26, requiring engagement of an external contractor to provide the focused effort required. This timing also depends on completion of the work relating to asset criticality and Failure Mode Effect and Criticality Analysis to ensure it is reflected in the documentation.

GAWB anticipates that these improvements will lead to better planning and investment decisions, including optimising the trade-off between capital and operating expenditure. It is difficult to quantify these expected benefits as it will ultimately depend on the optimal solution that is identified in each case, however efficiencies should be realised in both areas over the long term. The forecast for the FY2026-30 regulatory period already contemplates reductions in expenditure from 2029-30.

Summary of Maintenance Step Change

The step change for the forecast increase in expenditure associated with maintenance is provided below.

Table 7.7 Maintenance Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
802,156	272,024	846,470	454,202	(403,288)

This step change is considered to meet two of the QCA's criteria:

- represent cyclical activities that are not within annual business-as-usual budgets; and
- the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

7.5.5 Hatchery

Drivers

As outlined in Chapter 2, one of the approval conditions of the EIS completed for the raising of the Awoonga Dam wall in 2001 was an obligation to stock Lake Awoonga with migratory species of fish that are natural to the Boyne River, namely barramundi, mangrove jack and sea mullet. The EIS directed GAWB to finalise arrangements with Queensland Fisheries Services, as fish stocking was the responsibility of the administrator of the *Fisheries Act 1994* (Fisheries Act). In response to the EIS conditions GAWB obtained an unconditional General Fisheries Permit pursuant to the Fisheries Act, which authorised GAWB to hold and release undersized fish for the purpose of stocking Crown Waters.

Up until 30 November 2014, under its General Fisheries Licence, GAWB was to restock Awoonga Dam with a maximum of 450,000 fingerlings per annum. When the licence was renewed in November 2014, that increased to a maximum of 1.35 million fingerlings. The actual production that GAWB was able to achieve from 2013-14 to 2018-19 fell well short of that level, achieving a maximum of 555,488 in 2018-19 and averaging 243,000 per annum over those years. These outcomes reflected the limited capacity of the hatchery facilities at that point in time.

In November 2022, GAWB commissioned a new multi-species fish hatchery at Lake Awoonga, named Aquaculture Gladstone.⁶⁷ The capacity of this facility will enable GAWB to meet the higher regulatory target that it had previously been unable to meet since it was imposed in 2014. It is important that GAWB meet this target as it was an original condition of the approval of the Awoonga Dam wall raising. As noted in Chapter 3, this facility will also make a positive contribution to the Queensland Government's policy initiatives in relation to aquaculture, including the growth of the industry in Gladstone as one of eight ADAs in Queensland.

The hatchery now operates seven days a week and is utilised as a community resource. As the facility is required to meet a regulatory obligation associated with the utilisation of Awoonga Dam, the associated capital expenditure will be included in GAWB's RAB (refer Chapter 8). The business case for this investment was reviewed by the QCA as part of the 2020 Price Monitoring Investigation with the forecast capital expenditure found to be prudent and efficient.

Following completion of the hatchery in 2022 there was a ramp-up phase for production, which also means that GAWB was not producing to the nameplate capacity in the 2022-23 base year. The facility is now starting to operate at the appropriate level to produce the numbers of fingerlings required to meet GAWB's regulatory obligation.

GAWB has been incurring, and will continue to incur, additional operating expenditure for the new hatchery. The forecast expenditure reflected in the proposed step change represents the additional ongoing operating costs required to fulfil its annual licence obligation compared to the costs incurred in the 2022-23 base year, including fingerling food, hatchery operations and broodstock movement.

Summary of Hatchery Step Change

The step change for the forecast increase in costs associated with hatchery operations is summarised below.

Table 7.8 Hatchery Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
275,359	275,359	275,359	275,359	275,359

⁶⁷ It should also be noted that GAWB had to vacate the land where its previous hatchery facility was located, necessitating the construction of a new hatchery at a new site.

This step change is considered to meet two of the QCA's step change criterion:

- necessary to fulfil new, or changed, binding statutory or regulatory obligations; and
- the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

7.5.6 Insurance

Drivers

Like most regulated businesses and owners of major infrastructure, GAWB has experienced material increases in insurance premiums over the current regulatory period. This is forecast to continue into the FY2026-30 regulatory period. This reflects two main drivers:

- insurance market conditions, which has seen significant year-on-year premium increases;
 and
- increases in the sum insured due to asset growth.

GAWB has also extended its insurance coverage to include cyber security as part of the 2023-24 renewal, although this addition is not material in dollar terms.

Insurance market conditions

Insurance costs have materially increased in the current regulatory period, reflecting the global hardening of the insurance market and the impact of numerous natural disasters. Premiums have also been influenced by the availability and cost of reinsurance.

The chart in Figure 7.2 shows the trends in GAWB's actual insurance costs since the last year of the previous regulatory period (2019-20) to the end of the current regulatory period. Costs for 2024-25 are indicative only. It also shows the percentage increase in costs for each year compared to the prior year.

Compared to the allowance assessed by the QCA for the FY2021-25 regulatory period escalated using the original escalation rates applied at the start of this period for the 2022-23 and 2023-24 years (refer section 7.3), on average, GAWB's actual insurance costs have been around \$0.5 million per annum above the QCA's recommendations. This is despite the QCA's allowance already reflecting an escalation factor of 3.4% per annum above CPI. GAWB's insurance costs are projected to increase further in 2024-25 based on indicative rates from its insurance broker, Marsh. GAWB must absorb these increases or otherwise find material savings elsewhere in its operating budget.

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Noting that in setting its final prices to apply from 1 July 2020, GAWB also updated its forecast insurance costs for the 2020-21 year based on the most recent quotes from its insurance broker.

⁶⁹ Queensland Competition Authority (2020). p.24.

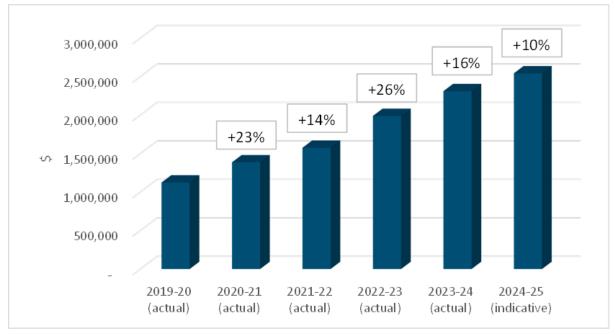


Figure 7.2 GAWB's Annual Insurance Costs¹ (\$ nominal)

1. Inclusive of stamp duty and professional fees

In GAWB's most recent renewal review, Marsh noted that based on the Marsh Global Insurance Market Index, despite some improvement in market conditions in the fourth quarter of 2023, global commercial insurance rates still rose by 2%. This is the twenty-fifth consecutive quarter in which composite rates have risen. This has been the longest run of quarterly increases since the inception of that index in 2012.⁷⁰

GAWB has also procured a report from Marsh (Marsh Report)⁷¹ to inform its consideration of the likely outlook for the FY2026-30 regulatory period (see Attachment 5) This examines insurance market conditions within the context of GAWB's business and risk profile. Marsh considers that the outlook for insurance costs over the next regulatory period could be moderating, although Marsh makes it clear that this means that premium *increases* are expected to moderate, not that premiums are expected to reduce.

There remains considerable uncertainty regarding the outlook for insurance over the FY2026-30 regulatory period, including the impact of major future climate-related events. Within this context, Marsh endorsed an appropriate assumption for annual premium increases to the end of the FY2026-30 regulatory period as CPI plus 2% per annum. This is particularly the case given GAWB is seen as having higher than average risk for insurance purposes.⁷²

Forecast RAB Growth

Increases in insurance costs can also reflect increases in coverage and sum insured amounts. Asset valuation reviews were undertaken for insurance purposes in 2020-21 and 2022-23. In

https://www.marsh.com/au/services/international-placement-services/insights/global_insurance_market_index.html {Accessed 8 April 2024}

⁷¹ Marsh (2024). Gladstone Area Water Board, Insurance Pricing Report for the Period Commencing 1 July 2025.

⁷² Marsh (2024). section 5.

2022-23, GAWB's cover was also extended to include cyber security, although this accounts for less than 4% of GAWB's total premium in 2023-24.

Particularly in view of the significant investments GAWB is undertaking in the FY2026-30 regulatory period, the Marsh Report separately considers the impact of asset growth on the premium. This impact will primarily be via the Industrial Special Risk (ISR) program, which accounts for around 70% of GAWB's total insurance premiums in 2023-24.

Marsh concludes that assuming no change in the insurance rate applicable to GAWB, there will be a one-for-one correlation between the ISR premium and asset growth. For example, if GAWB's insurance rate is 0.05 and the sum insured increases by 20% from \$1,000,000 to \$1,200,000, the premium paid would increase by 20%.⁷³

The actual profile of GAWB's RAB growth will be lumpy over the course of the FY2026-30 regulatory period. On average, based on forecast RAB (refer Figure3.7). GAWB's average annual RAB growth is 12%. The material impact of this growth on GAWB's insurance costs means it is considered important to capture those impacts as part of the forecast insurance costs as they cannot otherwise be absorbed by the business.

Proposed Treatment

GAWB notes that in Seqwater's most recent bulk water price review for the FY2023-26 regulatory period, the QCA accepted a proposed step change for an increase in insurance costs. This was primarily in recognition of insurance market conditions, similar to those that GAWB has been experiencing. The QCA accepted Seqwater's proposal while stating that it considered that it is better addressed through escalation.⁷⁴

GAWB considers that given the material step-up in insurance costs since the allowance was set for the current FY2021-25 regulatory period, it cannot be adequately addressed through escalation, noting that a (lower than actual) growth premium above CPI was already allowed for in the current operating expenditure allowance. This cost increase is also more difficult to address via escalation within the context of the base-step-trend methodology because while escalation rates are identified for key categories of operating expenditure, those escalators are not applied at an individual category level (as the operating expenditure forecast is not a category-based forecast). For Seqwater, a weighted average escalation rate was applied, and this is the approach applied by GAWB (refer section 7.6.2).

GAWB therefore considers that the more appropriate approach is to recognise the material uplift in insurance costs as a step change. This has two key elements:

- a 2% per annum premium above CPI to reflect insurance market conditions; and
- an additional 12% per annum to reflect forecast average annual RAB growth. This is only applied to the proportion of GAWB's total insurance costs accounted for by the ISR class (70%).

⁷³ Marsh (2024). section 6.

⁷⁴ Queensland Competition Authority (2022). p.27.

For the forecast 2025-26 insurance costs, GAWB has conservatively assumed a minimal increase from its current indicative 2024-25 insurance costs. It has then applied the above increments to that value from 2026-27.

For the purpose of determining its weighted average escalation rates (refer section 7.6.2) GAWB therefore proposes to index the insurance component at CPI.

Summary of Insurance Step Change

The proposed step change for the forecast increase in insurance costs is summarised below.

Table 7.9 Insurance Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
438,570	688,840	972,838	1,295,330	1,661,758

This step change is considered to meet the QCA's materiality criterion because the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

Insurance costs are largely beyond GAWB's control and will continue to be impacted by changes in market conditions. Following completion of the FY2020 Price Monitoring Investigation, GAWB updated its operating expenditure allowance for its updated insurance costs prior to setting final its final prices to be applied from 1 July 2020. This was noted by the QCA in its 2020 Final Report, stating that if GAWB chose to adopt those updated costs, it would need to transparently explain this to customers.⁷⁵ GAWB provided this explanation in its letter to customers setting out its final prices to apply from 1 July 2020, along with its submission to the QCA's 2023 Mid-term Review (refer Chapter 4).⁷⁶

GAWB therefore intends to similarly update its insurance costs prior to the commencement of the FY2026-30 regulatory period. This will involve an update to this step change based on the actual insurance costs for the 2025-26 year, following its annual renewal by Marsh towards the end of 2024-25. As necessary, GAWB will also update the forecast increase for asset growth, based on its final updated forecast RAB roll-forward.

7.5.7 Chemicals

Drivers

GAWB has experienced a material increase in the costs of chemicals that is forecast to continue into the FY2026-30 regulatory period. This is driven by two main factors:

 An increase in the unit cost of chemicals, which is being experienced across the industry and is not captured in the escalation factors. This reflects conditions in the global

⁷⁵ Queensland Competition Authority (2020).

⁷⁶ Gladstone Area Water Board (2023).

market for chemicals that emerged following the COVID-19 pandemic. This has been driven by supply chain pressures and geopolitical tensions, including the Russia-Ukraine war. The industry has been impacted by high energy costs, increased transportation costs and disruptions to the feedstock industry. While these pressures are beginning to moderate, they are expected to continue to affect the procurement of chemicals into the FY2026-30 regulatory period. GAWB procures chemicals under term contracts with suppliers (with the term depending on market conditions), which are subject to periodic open market tenders. It should also be noted that this industry is highly concentrated.⁷⁷

• An increase in the utilisation of chemicals, which includes:

- increased dosing of sodium hypochlorite for the new Kirkwood Reservoir, which was commissioned in May 2023;
- Powder Activated Carbon (PAC) following the recommissioning of GAWB's PAC plant that was not operating in the base year. PAC is used for taste and odour control or the removal of inorganic chemicals.

Further, the utilisation of chemicals varies from year to year, including with changes in water usage, as well as turbidity events (none of which were experienced in 2022-23). The 2022-23 base year could not be considered a representative year given higher than average rainfall. This in turn reduced the demand for water, which reduced the utilisation of chemicals for treatment. There has also been a small increase in consumables (such as cleaning equipment and chemical delivery costs) associated with the increased utilisation.

It should also be noted that this does not assume that GAWB will be subject to any major turbidity events. GAWB bears the risk that it will need to incur additional costs if and when such an event (or events) occurs.

Summary of Proposed Step Change

The proposed step change for the forecast increase in chemicals costs is summarised below.

Table 7.10 Chemicals Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
277,181	277,181	277,181	277,181	277,181

This step change is considered to meet the QCA's materiality criterion because the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

For example, on 23 May 2024, the Australian Competition and Consumer Commission, in response to an application by the Water Services Association of Australia, authorised the collective negotiation by water utilities for gaseous chlorine supply. While this is not currently used by GAWB, this does illustrate the characteristics of this industry more generally.

7.5.8 QCA Price Monitoring Investigations

Drivers

GAWB must periodically incur additional costs as a consequence of being subject to economic regulation by the QCA. This is a cyclical expenditure that is only incurred around the time of each economic regulation investigation (which is currently on a five-year cycle) and is therefore not reflected in GAWB's 2022-23 base year expenditure. GAWB also now incurs additional expenditure as part of the mid-term reviews, which will be undertaken again in the FY2026-30 regulatory period in accordance with the Referral Notice.

There are two main components to these costs. The first is the fee levied by the QCA, the bulk of which is payable towards the end of the regulatory period. GAWB has not yet been advised of the amount that will be payable to the QCA for the 2025 Price Monitoring Investigation, so it has had to base its forecast for the FY2026-30 regulatory period on the amounts paid for the 2020 Price Monitoring Investigation and the 2023 Mid-term Review. As these costs are typically not finalised prior to the end of the current regulatory period, this is addressed via an end-of-period true-up.

The second component of the costs is the use of external consultancies for specialist advice. GAWB operates with a small in-house regulatory team. It is therefore heavily reliant on external assistance for each price monitoring investigation. This reflects the need for supplementary resources as well as specialist expertise in key areas (e.g., rate of return and cost escalation). GAWB has based its forecasts for the FY2026-30 regulatory period on its indicative costs for the current period.

Both components assume some additional costs in 2025-26 as part of implementation of the outcomes of the current price monitoring investigation. Otherwise, most of the costs are forecast to occur in 2028-29 and 2029-30. To be clear, the allowance only includes costs incurred as part of:

- finalisation of the 2025 Price Monitoring Investigation;
- the 2028 Mid-term Review (to be completed in 2028);
- costs incurred for the QCA's subsequent price monitoring investigation (i.e., for the period from 1 July 2030), incurred up to 2029-30.

GAWB has not allowed any additional costs for any subsequent investigation by the QCA of the pricing impact of the FGP.

Summary of QCA Price Monitoring Investigation Step Change

The step change for the forecast costs associated with the QCA's price monitoring investigations is summarised below.

Table 7.11 QCA Price Monitoring Investigation Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
102,687	-	-	746,815	2,446,769

This step change is considered to meet two of the QCA's criteria:

- represent cyclical activities that are not within annual business-as-usual budgets;
- the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

7.5.9 Tariff Review

Drivers

Chapter 3 outlined changes to GAWB's network, business operations and customer base which will necessitate a review of GAWB's tariff structures. As discussed in Chapter 12, while acknowledging the benefits of GAWB's current zonal pricing structure, in its 2020 Final Report the QCA suggested that GAWB consider an alternative approach that balances simplicity and cost reflectivity.⁷⁸

The degree of uncertainty associated with factors that will influence the scope and complexity of a thorough and considered tariff review, including the need for effective customer consultation, means it is neither feasible, nor appropriate, to undertake this review as part of the 2025 Price Monitoring Investigation (refer Chapter 12).

GAWB therefore proposes to undertake a tariff review program during the FY2026-30 regulatory period. Given the scope and complexity of the review, the flow-on impacts to Gladstone industry and the requirement for extensive customer and stakeholder engagement, GAWB will require additional external resources to support the review. The types of activities involved are expected to include:

- economic analysis;
- customer and stakeholder engagement at multiple stages during the process;
- the identification and assessment of options;
- revenue and price modelling (including individual customer impacts);
- a legal review of water supply contracts; and
- implementation activities, including ICT system changes.

It is currently expected to commence in the first year of the regulatory period (2025-26) and be completed by 2027-28. This will also be necessary to enable effective customer and stakeholder engagement prior to the next price monitoring investigation.

As this is a material one-off expenditure, it is not reflected in the 2022-23 base year. To the extent that costs are incurred in the base year for the regulatory period commencing 1 July 2030, they would be removed as a base year adjustment.

⁷⁸ Queensland Competition Authority (2020). pp.118-119.

Summary of Tariff Review Step Change

The step change for the forecast costs associated with undertaking a review of GAWB's tariff structure is summarised below.

Table 7.12 Tariff Review Step Change (\$2022-23)

2025-26	2026-27	2027-28	2028-29	2029-30
93,352	326,731	326,731	-	-

This step change is considered to meet two of the QCA's criteria:

- represent cyclical activities that are not within annual business-as-usual budgets;
- the increase in costs is of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

7.6 Trend Factors

The trend factors applied to operating expenditure may account for output (or demand) growth and cost escalation.

7.6.1 Output Growth

Output growth refers to the rate at which forecast real operating expenditure is expected to grow annually over the regulatory period to reflect the growth in the outputs delivered by the business to customers.

GAWB has a unique demand profile compared to other regulated water networks, given it is comprised of a small number of large industrial customers, along with GRC (who services a mix of residential, commercial and industrial customers). This means that changes in demand are more likely to be lumpy or change in a step-wise fashion. This contrasts with most other bulk water providers in Australia, where demand growth is likely to have some correlation with population growth and/or metrics such as growth in customer connections. GAWB's demand outlook for the FY2026-30 regulatory period is addressed in Chapter 5.

Given this, GAWB considers that any consequent impact of changes in demand on operating expenditure is more appropriately addressed in step changes. This also allows the implications of demand growth to be more specifically targeted. As outlined in section 7.5, the potential growth in demand from new hydrogen customers, as well as the increased network and operational complexity from new investments, has influenced some of the step changes proposed for the FY2026-30 regulatory period. It is also addressed as part of the forecast capital program (refer Chapter 8).

GAWB is therefore not proposing any allowance for output growth in the trend factor.

7.6.2 Escalation Factors

Referral Notice

The Definition of Allowable Costs in the Referral Notice provides:

Base-year operating expenditures are to be escalated using Forecast Inflation.

The definition of Forecast Inflation in the Referral Notice is:

Inflation based on the methodology outlined in the QCA's Inflation Forecasting Position Paper.

The methodology outlined in the QCA's Inflation Forecasting Position Paper reaffirms the approach that the QCA has historically applied in relation to escalation factors for capital and operating expenditure, which is that:

Our position is to use expected CPI inflation to escalate opex and capex input costs where the underlying cost drivers are not materially different from CPI inflation; however, to use input-specific or sector-specific cost escalators where underlying cost drivers are materially different from CPI inflation.⁷⁹

This is the approach that the QCA has previously applied to GAWB, and was also applied to Seqwater in assessing its base-step-trend operating expenditure forecast in the FY2023-26 bulk water price review. It is also consistent with the approach generally applied by Australian regulators, including in the water sector.

As outlined below, GAWB engaged Frontier to review the appropriate cost escalators to apply for the FY2026-30 regulatory period (refer Attachment 2). This includes assessing the extent to which any of the cost categories continue to have underlying cost drivers materially different from CPI inflation, consistent with the QCA's Inflation Forecasting Position Paper.

If CPI inflation was the only inflation rate used to escalate GAWB's operating expenditure forecasts, and certain elements of expenditure have cost drivers that are materially different from CPI inflation, then GAWB would not be properly compensated for its prudent and efficient costs.

This interpretation of the Referral Notice and the QCA's Inflation Forecasting Position Paper is supported by, Frontier.

GAWB has therefore developed its forecast escalation factors consistent with requirements of the Referral Notice and using the same approach applied in previous reviews, which is to:

- where appropriate, apply CPI inflation; and
- apply an alternative escalation factor where the underlying cost driver is materially different from CPI inflation.

This is directly consistent with the QCA's Inflation Forecasting Position Paper, as cited above.

⁷⁹ Queensland Competition Authority (2021a). Final Position Paper, Inflation Forecasting, p.15.

Escalation Approaches

The starting point for Frontier's assessment was to determine, for each cost category, whether the underlying cost drivers are (or remain) materially different from CPI inflation and having regard to the approach applied in the current period. In determining the most appropriate escalation factor, Frontier applied a set of assessment criteria, which included having regard to the QCA's preference for forecasts that are transparent and sourced from publicly available information.

Overall, based on Frontier's recommendations, GAWB proposes to largely maintain the same approaches from the FY2021-25 regulatory period in determining the escalators applied to each category. The only difference is that GAWB proposes to base the escalator for contract labour costs on the same approach that is used to escalate employee costs. This is considered appropriate because contract labour is used to supplement GAWB's internal labour, for example, to temporarily back-fill roles that are unable to be filled, or for parental leave relief.

GAWB also notes that the premium above the Wage Price Index (WPI) that was applied to GAWB's employee costs in the current regulatory period was in response to the relatively faster rate of growth in public sector wages. This was assumed to disappear by the end of the FY2021-25 regulatory period.⁸⁰

Chapter 3 described the significant labour cost pressures that have emerged in the current regulatory period, reflecting the very tight market for labour, particularly in the Gladstone region. This has been directly evidenced by GAWB's higher vacancy rates and challenges in filling roles. These labour cost pressures are expected to continue as GAWB competes for scarce resources with major projects.

Part of the labour cost step change reflects the uplift in remuneration and benefits implemented from 1 July 2023 (refer section 7.5.1). However, this component is only a 'catch up' that put GAWB in a better position to compete in the current labour market. With tight conditions expected to persist into the next regulatory period, the maintenance of a premium above WPI for GAWB's employee costs, along with contract labour, remains very important. However, there is no reliable publicly available data on regional labour costs, nor is there any such information in terms of what premium might need to be applied to attract skilled labour to regional areas.

In the absence of any reliable publicly available basis or data to estimate the forecast growth in labour costs in the Gladstone region above the WPI, Frontier recommends that this is based on the difference between construction sector WPI growth and general WPI. This is also consistent with Mercer's assessment of GAWB's labour force composition as part of its annual benchmarking, where it considers the most relevant comparator markets to be the General market and the Resources, Construction and Engineering market (refer section 7.5.1). It estimates this premium to be 0.15% per annum, forecasting that it will decline to zero by 2029-30.

GAWB therefore proposes to apply this profile to GAWB's labour costs and contract labour costs. As it assumes that this premium will gradually decline to zero, GAWB is bearing the risk

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⁸⁰ Queensland Competition Authority (2020). p.33.

that these cost pressures do not abate over the course of the FY2026-30 regulatory period. With pressures expected to continue well into the FY2026-30 regulatory period, and noting the volume of construction activity anticipated for the latter years of the period (refer Chapter 3), GAWB considers that the assumption of a declining premium is highly conservative.

GAWB's proposed escalation approach for each cost category, along with the approach applied in the current FY2021-25 regulatory period is outlined in Table 7.13.

Table 7.13 Proposed Escalation Approaches

Table 7:10 Troposed E	scalation Approaches	
Cost category	Approach applied in FY2021-25 period	Approach proposed for FY2026- 30 period
Insurance	CPI + historical insurance growth premium of 3.4%	СРІ
	promisin or 6. 176	Above CPI growth (+ 2% p.a.) is addressed directly in the step change, along with average annual forecast RAB growth (+12% p.a.)
Chemicals	CPI	СРІ
Council charges (rates)	A composite escalator as published in the Gladstone Regional Council's 2018-19 Annual Report.	Updated composite escalator as published in the Gladstone Regional Council's 2022-23 Annual Report.
Employee costs	WPI + premium to reflect the difference between 2018-19 public sector WPI growth and general WPI	WPI + premium of 0.15%, reflecting the difference between construction sector WPI growth and general WPI growth. This is assumed to linearly decline to zero over the FY2026-30 regulatory period.
Professional services (engineering)	WPI	WPI
Contract labour costs	WPI	WPI + premium of 0.15%, reflecting the difference between construction sector WPI growth and general WPI growth. This is assumed to linearly decline to zero over the FY2026-30 regulatory period.
Contractors (service delivery)	WPI	WPI
Other material and services	75% WPI	75% WPI
COLVIOCO	25% CPI	25% CPI

Cost category	Approach applied in FY2021-25 period	Approach proposed for FY2026- 30 period
Maintenance	70% labour (WPI)	70% labour (WPI)
	30% materials costs (CPI)	30% materials costs (CPI)
Electricity	Nominal forecasts adopted	СРІ
Operations	СРІ	СРІ
Information systems and administration	СРІ	СРІ

7.6.3 Forecasting Approach for CPI and WPI

The forecast for CPI has been developed using the QCA's preferred approach set out in its Inflation Forecasting Position Paper,⁸¹ which is also consistent with the terms of the Referral Notice.

In forecasting the WPI, the QCA's current preferred approach is based on:

- Queensland Treasury's Queensland WPI forecasts (across all industries) where available; and
- the 10-year average of the Queensland WPI for the remainder of the price monitoring period.

Frontier used this as the basis for its approach to forecast the WPI for GAWB. However, Frontier notes that the QCA's preferred approach (including at the time of the 2020 Price Monitoring Investigation) was to forecast CPI and WPI over a ten-year horizon. Following the conclusion of its inflation forecasting methodology review in 2021, the QCA's preferred approach for inflation is to now forecast this over a five-year horizon. It also gradually transitions from the year two forecast (being the last year of the published RBA forecasts) to a long-run rate by year five.

Frontier advises that it would be sensible to apply a similar approach for WPI. It therefore proposes that:

- the forecast WPI rates for years one and two of the FY2026-30 regulatory period should be obtained from Queensland Treasury forecasts (as per the existing approach);
- the WPI rate of inflation then transitions gradually over the remaining years of the regulatory period to the ten-year historical average by year five of the period.

This approach will avoid sharp changes between years two and three which can sometimes occur under the QCA's prior approach. GAWB considers it appropriate to adopt Frontier's

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⁸¹ Queensland Competition Authority (2021a).

recommended approach and agrees that the gradual transition is consistent with the QCA's preferred approach for inflation.

It should also be noted that because Queensland Treasury forecasts of WPI are not yet available for 2025-26 and 2026-27 (the first two years of GAWB's next regulatory period), Frontier has had to adopt a placeholder forecast. This is based on the ten-year historical average of the annual change in the WPI, which is 2.28% per annum.

Proposed Forecast Rates

The proposed forecast escalation rates for each main cost category are shown below. The forecast escalation rates for CPI and WPI are based on the latest available market data as at 30 April 2024. This includes the escalation rates for the last two years of the current regulatory period.

The forecasts are therefore indicative. The final escalation rates used to set prices will be updated prior to the start of the FY2026-30 regulatory period, using the most recent information available at the time.

Table 7.14 Forecast Escalation Rates by Category – Indicative (%)

Category	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Employee costs	4.90	3.65	3.38	3.10	2.83	2.55	2.28
Contract labour	4.90	3.65	3.38	3.10	2.83	2.55	2.28
Contractors (service delivery)	4.75	3.50	3.26	3.01	2.77	2.52	2.28
Professional services	4.75	3.50	3.26	3.01	2.77	2.52	2.28
Materials	3.80	3.20	2.60	2.57	2.53	2.50	2.50
Other materials and services	4.51	3.43	3.09	2.90	2.71	2.52	2.34
Maintenance	4.47	3.41	3.06	2.88	2.70	2.52	2.35
Chemicals	3.80	3.20	2.60	2.57	2.53	2.50	2.50
Insurance	3.80	3.20	2.60	2.57	2.53	2.50	2.50
Council rates	4.41	3.39	3.02	2.85	2.68	2.52	2.36

Application in the Base-Step-Trend Forecast

As base-step-trend is a top-down approach rather than a bottom-up category-based forecast, the escalators are not applied at an individual category level. GAWB proposes to apply a weighted average escalation rate, where the weights reflect the proportion of each category

as a percentage of total operating expenditure. These proportions are based on actual 2022-23 (base year) expenditure.

This is consistent with the approach applied for the escalation of Seqwater's fixed operating expenditure in the QCA's 2022-26 bulk water price review,⁸² noting that Seqwater's fixed and variable operating expenditure is forecast and assessed separately.

The forecast weighted escalation factors (indicative) are as follows.

Table 7.15 Forecast Weighted Escalation Factor – Indicative (%)

2025-26	2026-27	2027-28	2028-29	2029-30
3.10	2.91	2.72	2.53	2.35

As the base year is expressed in 2022-23 dollars, forecast escalation rates and a weighted escalation factor have also been applied to index these amounts to 2025-26 dollars⁸³ using the same methodology as outlined above. The forecast weighted rates outlined in Table 7. are then applied to the combined base year expenditure and the forecast step changes for the FY2026-30 regulatory period.

7.6.4 Efficiency

For the current FY2021-25 regulatory period, the QCA found that an efficiency target of 1% per annum should be applied to GAWB's controllable operating expenditure. That was the approach GAWB adopted in setting its final prices. As shown in section 7.3, GAWB's actual operating expenditure has been below the QCA's allowance, net of that efficiency factor, for the first three years of the current regulatory period. It is then forecast to increase materially in response to a range of pressures on GAWB's operating expenditure.

Approach

GAWB's 2022-23 base year expenditure, that has been used to set forecast operating expenditure for the FY2026-30 regulatory period, was below the QCA's recommended allowance (although not materially), net of the efficiency factor. This embeds a prudent and efficient base into GAWB's forecast operating expenditure.

It is noted that the approach accepted by the QCA for Seqwater in its FY2022-26 bulk water price review was to apply an efficiency factor of zero, accompanied by a 'credible efficiency plan'. The QCA also stated that the development of such a plan was considered to be a priority because of the overspend in Seqwater's base year relative to the QCA's recommended allowance.⁸⁴

⁸² Queensland Competition Authority (2022). pp.29-30.

This approach is also used to de-escalate forecast expenditure, expressed in nominal dollars, to 2022-23 dollars for the purpose of calculating step changes relative to 2022-23 base year expenditure. The resulting step changes, which are in 2022-23 dollars, are then similarly escalated to nominal dollars.

⁸⁴ Queensland Competition Authority (2021b). Draft Report, Seqwater Bulk Water Price Review, November, p.31.

GAWB agrees that such an approach may be reasonable for a business operating in a comparatively stable environment. The potential scope and pace of change in GAWB's business and operating environment means that this is not considered an appropriate strategy for GAWB at the current time. In any case, in contrast with Seqwater, GAWB's actual expenditure was below the QCA's allowance in the base year.

GAWB procured a report from Frontier to help determine an appropriate efficiency target for the FY2026-30 regulatory period (refer Attachment 3). In the first instance, Frontier highlighted the importance of distinguishing between catch-up and continuing efficiencies in the context of base-step-trend. It states that:

- the catch-up element is considered when determining the efficient level of base year operating expenditure; and
- the continuing efficiency element (or 'frontier shift') is reflected in the trend factor.

Accordingly, only continuing efficiency should be considered for the purpose of determining the trend factor. As GAWB's actual 2022-23 base year expenditure was below the level deemed prudent and efficient by the QCA (net of the efficiency target), no additional adjustments are required to that base year for catch-up efficiencies.

There is insufficient data available to use econometric techniques to derive productivity growth estimates for GAWB. Frontier instead relied on two main sources of information in assessing an appropriate rate for GAWB.

- The first source is productivity growth rates derived from the National Performance Review dataset (NPR). Unfortunately, the data for bulk water providers was not sufficiently reliable to derive robust estimates, so the analysis is of water distribution businesses. This work updated similar analysis that Frontier undertook for Seqwater as part of its FY2022-26 bulk water price review.
- The second source is productivity growth rates applied in a range of regulatory decisions for water businesses between 2017 and 2023. However, as Frontier highlights in its report, much of this precedent is not directly applicable to GAWB as the factors applied in those decisions tend to combine catch-up and continuing efficiencies.

Overall, Frontier concluded that this data supports an annual efficiency of 0.2% per annum (reflecting ongoing efficiencies). This result is also consistent with the value applied in the decisions for Seqwater and Sunwater for the pricing of rural irrigation services for the FY2021-24 period.⁸⁵

GAWB has therefore applied an efficiency factor of 0.2% per annum (cumulative) in its trend factor applied to forecast operating expenditure for the FY2026-30 regulatory period. The efficiency factor has been applied to the escalated base year plus step changes. It is therefore important to note that GAWB is applying this to its total operating expenditure, which includes controllable and uncontrollable expenditure. This is different to the current approach, which limits the application of an efficiency factor to controllable expenditure only.

https://www.qca.org.au/project/rural-water/irrigation-price-investigations/ {Accessed 29 May 2024}

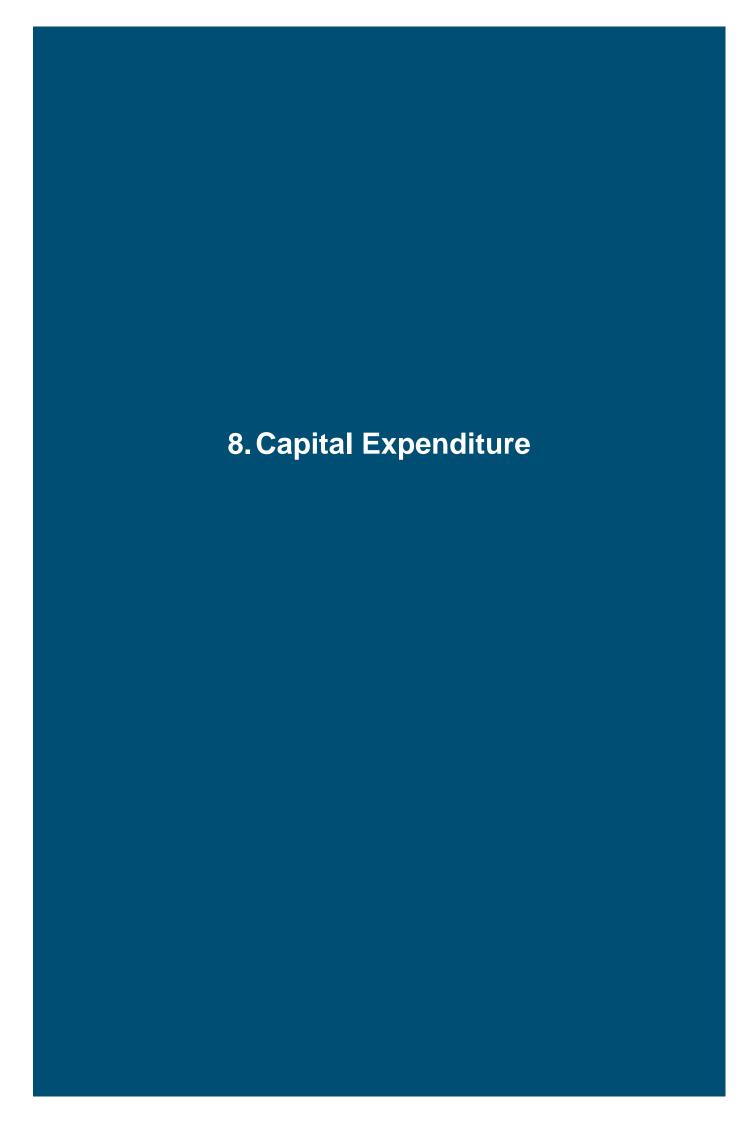
7.7 Summary of Forecast Operating Expenditure

A summary of GAWB's proposed operating expenditure for the FY2026-30 regulatory period is shown below.

Table 7.16 Total Forecast Operating Expenditure FY2026-30 (\$M)

	2025-26	2026-27	2027-28	2028-29	2029-30
Base year (\$2022-23)	30.76	30.76	30.76	30.76	30.76
Total step changes (\$2022-23	9.14	9.73	11.09	11.94	13.96
Total: base + step changes (\$2022-23)	39.91	40.49	41.86	42.70	44.73
Escalated base year + step changes (\$nominal)	44.49	46.47	49.34	51.60	55.33
Efficiency savings (\$nominal)	(0.27)	(0.37)	(0.49)	(0.62)	(0.77)
Total operating expenditure (\$nominal) ¹	44.23	46.09	48.85	50.99	54.56

^{1.} Numbers may not add due to rounding.



GAWB's capital expenditure forecast is underpinned by a robust planning and governance framework. Actual expenditure in the current period has been impacted by COVID-19, changes in compliance obligations, as well as a range of regional cost pressures. GAWB is currently embarking on the largest capital program in its history, which is being carefully planned and managed to ensure timely and efficient delivery. Ongoing improvements to GAWB's Project Management Framework (PMF) will support this outcome.

8.1 Overview

8.1.1 Materiality of Expenditure

The Referral Notice requires that in assessing GAWB's capital expenditure, the QCA is to form a view on prudency and efficiency using an appropriate sample size and to focus on "the projects with a material impact on the RAB in aggregate."

The Referral Notice does not define 'material impact' and the QCA has declined to specify or prescribe materiality thresholds in the past.⁸⁶ In the interests of transparency and consistency GAWB has offered the QCA a significant number of projects from which to select a sample for detailed review.

In respect of future submissions, GAWB considers it appropriate to apply a threshold when identifying projects. Such a threshold would have regard to the material impact of the project on the RAB.

The Referral Notice specifies materiality in the context of impact on the RAB, and GAWB's RAB is forecast to significantly increase by the end of 2030. To the extent the QCA's current preference continues, GAWB submits the QCA should take account of the material increase in GAWB's RAB when interpreting what projects "will have a material impact on the RAB in aggregate".

8.1.2 Categorisation of Expenditure

Consistent with the approach applied in the current and prior regulatory periods, GAWB's capital expenditure has been categorised as set out below.

Risk	The project is required to address a credible risk in GAWB's current operating environment.
Replacement	The project is required to replace assets that are assessed as being at the end of their useful life or which are assessed as being non-maintainable.
Regulation	The project is undertaken to achieve compliance with a requirement of law or regulation, for example the <i>Work Health and Safety Act 2011 (Qld)</i> . Alternatively, the project is being undertaken to align with a government policy or guideline.

⁸⁶ For example, refer: Queensland Competition Authority (2020). pp.58-59; Queensland Competition Authority (2022). p 33.

Network augmentation	The project is required to meet increased customer demand through the augmentation of the delivery network.
Business process improvement (including investments requested by the community or customers)	The project is justified by reference to the efficiencies that it will bring to GAWB's operations or is in response to an explicit request from the Community Consultative Forum (CCF), customers or key stakeholders.

8.1.3 Governance Framework for Project Delivery

Efficient delivery of GAWB's capital works program is governed by its capital planning project management framework. During the 2020 Price Monitoring Investigation, the QCA considered GAWB's approach to be robust. At that point in time GAWB's approach to project governance and management was fit for purpose and established a foundation of best practice within the business.

Since then, GAWB has continued to mature its understanding of project planning and delivery. During the current regulatory period GAWB commenced a review of its capital project governance frameworks. The objective of this review was to ensure GAWB continues to meet regulatory requirements in the most efficient way and is better equipped to plan, deliver and manage projects of increased value, risk and complexity. It was also to ensure there is appropriate oversight and support based on project classifications, which are determined by financial commitment and risk assessment.

The review of the capital project governance frameworks has been affected by COVID-19 and the need to prioritise project delivery. Over this time, incremental changes were made where appropriate. This was to ensure identified efficiencies could be realised in a timely manner, especially if they resulted in reduced delivery costs and/or operational risks.

The PMF represents the culmination of these incremental improvements and the outcome of the more longer-term assessment of best practice, having regard to GAWB's current and future operations. The PMF comprises processes and activities that span a project lifecycle from initiative identification through to project delivery and asset handover. It also provides a clear methodology and supporting guidance for each project level, i.e., the approach is scaled based on the attributes of the project to be delivered.

A PMF transition plan has been developed to support business-wide training and awareness activities. Formal deployment of the PMF is anticipated to occur in late 2024. Features and outcomes of the revised PMF are summarised in Figure 8.1.

Provides a consistent GAWB-wide framework for managing programs Project governance: GAWB's Improved project outcomes project management and projects policies, procedures and the principals of project Aligns projects with GAWB's strategic management plans including the 5 Year Capital PMF Features Plan and annual Corporate Plan Project management Increases project transparency and workflow and associated visibility to enable effective and processes for each project repeatable decision making regarding classification the optimal use of resources Delivers services through improved project management capability Guidelines, tools, templates, roles and responsibilities Improves the efficiency and consistency of project delivery

Figure 8.1 Features and Outcomes of GAWB's PMF

8.1.4 Development and Delivery of the Capital Program

Previously, outputs from the LCMPs were the main tools for identifying projects for inclusion in GAWB's capital program. In its Final Report for the 2020 Price Monitoring Investigation, KPMG (the QCA's consultant) recommended that:

GAWB be encouraged to undertake more condition assessment studies and to look for additional options through its decision-making processes in the scoping and planning phases of its project management framework, so that approaches other than only pure replacement are explored.⁸⁷

Under the revised PMF, there is increased scrutiny of initiatives before they progress to project initiation. In addition to LCMP inputs, GAWB requires initiatives to be supported by recent condition assessments. Once accepted, projects are then prioritised with a goal of maximizing organisational value. To GAWB, the "value" of a program or project is based on its contribution to the achievement of strategic goals and mitigation of strategic risks.

The governance structure is classified into three categories based on the estimated cost and risk of the project ('Minor', 'Medium' and 'Major') with oversight of Major and Medium programs and projects provided by a Program and Project Working Group (PPWG). The PPWG is chaired by the GM Network and is to meet at least monthly to review project status. For these projects, a Project Control Group (PCG) is also established, comprising key team members involved in the project, along with the Project Manager. This group meets more frequently and

⁸⁷ KPMG (2020). Final Report – GAWB expenditure review, May, p xx.

is chaired by the relevant Program Delivery Manager. The PCG will report into the monthly PPWG meeting, including escalating issues as required.

8.2 Capital Expenditure FY2021-25

GAWB expects to capitalise over \$84.16 million of project costs for the FY2021-25 regulatory period. This value includes expenditure forecast to be capitalised during 2023-24 and 2024-25 and includes IDC. Consistent with the methodology accepted by the QCA in the 2020 Price Monitoring Investigation, IDC has only been applied to projects with a value greater than \$1 million.

As shown in Table 8.1 capitalised expenditure over this period is expected to be \$88.94 million less than forecast.

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Forecast capitalisation	39.79	21.34	21.59	5.97	84.42	173.11
Actual capitalisation ¹	5.00	26.94	9.32	11.21	31.70	84.16
Variance between forecast and actual capitalisation	(34.80)	5.59	(12.26)	5.25	(52.72)	(88.94)

- 1. Including forecast capitalisation for 2023-24 and 2024-25.
- 2. Inclusive of Curtis Island.
- 3. Excludes the capitalisation of the ARUR associated with the raising of the Awoonga Dam Wall.
- 4. Numbers may not add due to rounding.

GAWB's capitalised expenditure for the FY2021-25 regulatory period is forecast to be below the forecast submitted to the QCA in the 2020 Price Monitoring Investigation. Overall, this reflects the challenging business and operating environment outlined in Chapter 3, namely, the impact of domestic and global supply chain constraints and the consequent impact on the availability and cost of resources, including labour and materials. The availability of labour in the region was also impacted in the first half of the FY2021-25 regulatory period as a consequence of the COVID-19 pandemic.

While these challenges have impacted most infrastructure providers to some degree, they have been exacerbated at a regional level. As described in Chapter 3 these disruptions have occurred at a time when the Gladstone region is undergoing further transformation with the expansion and diversification of its economic base. GAWB has faced intense competition for labour, with much of that demand being for skills that directly or indirectly support construction activities.

This has resulted in a need for GAWB to re-prioritise and re-profile its capital expenditure program over the FY2021-25 period.

The most material contributor to the lower than forecast capitalisation amount over the FY2021-25 period is due to the deferral of the Awoonga Dam Improvement Project. As described in Chapter 3, changes to requirements have seen a material change in the scope,

timing and cost of this project. This individual project accounted for \$60.05 million of forecast capitalisation in 2024-25. Capitalisation of expenditure associated with this project will not occur in the current regulatory period nor is it expected to occur in the FY2026-30 regulatory period.

Whilst this project was a significant portion of the total forecast capitalisation amount forecast for the FY2021-25 regulatory period, it did not have a significant impact on prices. This is because the capital forecast used to determine prices to apply for the FY2021-25 period assumed this project would be capitalised into the RAB as at 1 January 2025. Therefore, an amount that represented six months' worth of return of (i.e., depreciation) and return on capital was included in the calculation of the Annual Revenue Requirement (ARR) for 2025-26. This added approximately \$0.91 million to GAWB's ARR (\$2020-21) (i.e. approximately 0.3% of total ARR) for the regulatory period and accounted for approximately 0.8% of GAWB's Storage Access Price.

The outcomes for two key projects completed during the FY2021-25 regulatory period are summarised below.

Aquaculture Gladstone (Hatchery)

As outlined in Chapter 2, GAWB operates a hatchery for various fish species to meet its regulatory obligations in relation to the restocking of Awoonga Dam which is a condition attached to the State Government's approval of the Awoonga Dam wall raising in 2001.

GAWB's previous hatchery facility did not have the capacity to produce hatchlings to a level that would enable it to comply with its regulatory obligation. Further, that facility was on land owned by the Gladstone Ports Corporation Limited (GPCL). Due to GPCL's East Shores development, GAWB was required to vacate that land and relocate the hatchery infrastructure. The new facility was designed to a nameplate capacity that would enable it to comply with GAWB's obligations.

The new hatchery was constructed at Lake Awoonga and completed in 2023. It now operates under the business name 'Aquaculture Gladstone', GAWB is currently on track to meet its annual regulatory target for the restocking of barramundi, mangrove jack and sea mullet fingerlings for the first time in 2023-24.

In addition to enabling GAWB to meet its regulatory obligations, the facility also supports community and recreation activities, as well as research and education.

Lake Awoonga Recreational Strategy

In 2018 the Gladstone community was invited via various consultative activities to make submissions on ways GAWB could enhance liveability in the region. Several initiatives were identified through this process and collectively represent the Lake Awoonga Recreational Strategy. Over the FY2021-25 regulatory period, it was forecast that over \$7.2 million would be spent on activities set out in the Lake Awoonga Recreational Strategy.

In 2020 GAWB engaged town planners, Urbis, to prepare a Master Plan which would support and guide implementation of the Lake Awoonga Recreational Strategy. The Master Plan took the 28 projects identified in the Lake Awoonga Recreational Strategy and created a roadmap for investment. The roadmap prioritised the projects according to their alignment with the core objectives of the Lake Awoonga Recreational Strategy.

The Lake Awoonga Master Plan builds on the creativity of the strategy and highlights the future potential of other areas. It is also an overarching vision for future investment opportunities for new or improved recreational activities.

Earlier this year the above achievements were discussed with the CCF along with the future activities identified in the Master Plan. Through these discussions, the CCF confirmed their support for continuing to progress with the Master Plan and the overarching objectives of the Lake Awoonga Recreational Strategy. Over the next regulatory period approximately \$7.5 million will be invested to further expand the recreational areas (e.g. Castle Tower and Ironbark Gully) and provide more defined walking and cycle networks.

8.3 Capital Expenditure FY2026-30

As noted in section 8.1.3 improvements have been made to the governance and planning frameworks applicable to GAWB's capital planning and delivery processes. The improved frameworks have guided the development of the capital forecast.

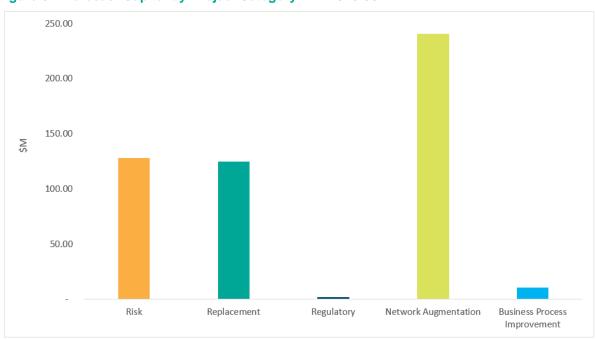
A capital forecast of \$504.95 million is proposed for the FY2026-30 regulatory period. Most of this expenditure will be for network augmentation to provide for new customer demand and to replace ageing assets or address identified risks (see Figure 8.2).

Table 8.2 Capitalised Forecast (including IDC) (\$ million)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Forecast capitalisation	86.50	239.36	124.66	17.32	37.12	504.95

^{1.} Inclusive of Curtis Island.

Figure 8.2 Forecast Capital by Project Category – FY2026-30



^{2.} Numbers may not add due to rounding.

As shown in Figure 8.3, in terms of project numbers, most investment activities will be in the area of asset replacement.

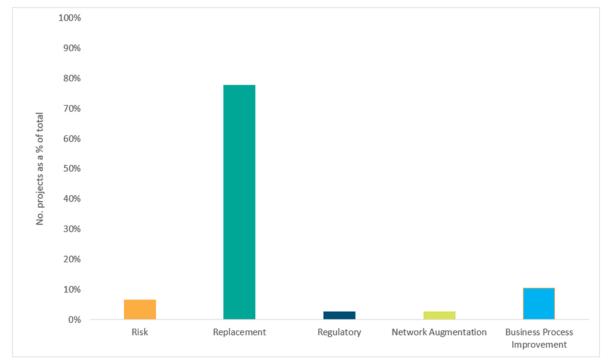
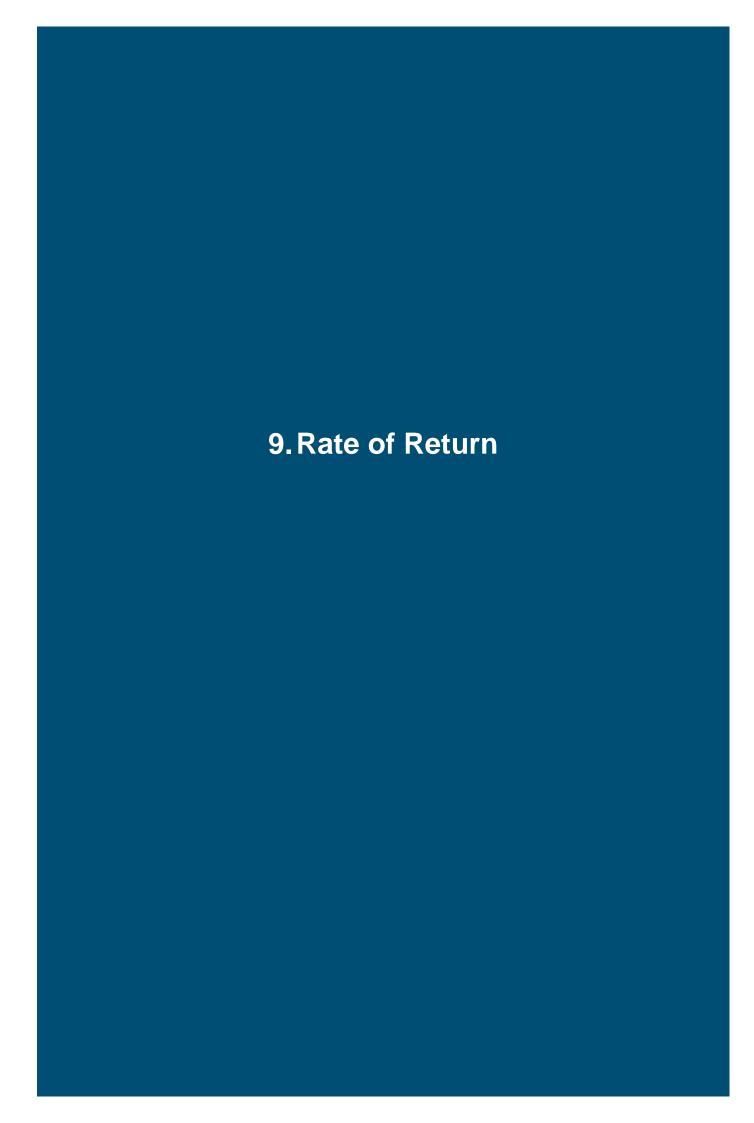


Figure 8.3 Forecast Capital by Number of Projects – FY2026-30

As GAWB is proposing to set prices to fully recover its efficient costs over the FY2026-30 period, the capital forecast captures only expenditure related to capital projects that are expected to be capitalised over the FY2026-30 regulatory period.



GAWB has estimated its Weighted Average Cost of Capital (WACC) having regard to the QCA's Rate of Return Report Version 2 (2023) (QCA's Rate of Return Report), as specified in the Referral Notice. GAWB notes the materially different economic and financial market environment prevailing at the current time, compared to that at the time of the 2020 Price Review. Most significant is the increase in the risk-free rate from the historical lows that prevailed at the time that GAWB's current WACC was set for the FY2021-25 regulatory period.

GAWB's estimates for benchmark gearing, gamma and the return on equity are based on the methodologies and parameter inputs preferred by the QCA in its Rate of Return Report. Consistent with the Referral Notice (and the QCA's Rate of Return Report), GAWB's return on debt will be estimated using the trailing average approach for the first time in the FY2026-30 regulatory period. The approach proposed by GAWB differs from the QCA's preferred approach as follows:

- A ten-year transition will be applied, as stipulated in the Referral Notice.
- GAWB is proposing the application of a weighted average, based on advice from QTC as
 to the most efficient debt management practice to apply in view of the size of the
 borrowings it must make in the FY2026-30 regulatory period. The QCA's preference is a
 simple average.

GAWB's indicative WACC of 7.88% (post-tax vanilla) is based on a twenty-day averaging period ending 30 April 2024. This is materially higher than its current WACC of 4.74%, which is mainly driven by the increase in the risk-free rate. This is beyond GAWB's control.

The initial WACC will apply for the first year of the FY2026-30 regulatory period (2025-26). Consistent with the approach applied in the current period, this will be updated as close as possible to 1 July 2025, based on an averaging period that will be confidentially nominated in advance to the QCA. The return on debt will then be updated annually under the trailing average approach.

9.1 Referral Notice

The Referral Notice provides that GAWB's Allowable Costs include "an Appropriate Rate of Return on the RAB." It defines Appropriate Rate of Return as follows:

A Weighted Average Cost of Capital based on the methodologies outlined in the Authority's Rate of Return Review Final Report 2023.

For estimating the cost of debt, a 10-year transition from the 'on-the-day' approach to the 'trailing average' approach (consistent with the Australian Energy Regulator's transition arrangements) applies.

The QCA's Rate of Return Review was completed in 2021 and has been subject to subsequent minor amendments. The Referral Notice refers to Version 2, which was published in 2023 (QCA's Rate of Return Report).⁸⁸ Further minor amendments were contained in Version 3, published in 2024.

⁸⁸ Queensland Competition Authority (2023b). Final Report, Rate of Return Review, Version 2.

Consistent with historical practice and incentive-based regulation in Australia more generally, GAWB's WACC is set based on an efficient benchmark. That is, what is the rate of return required by investors (equity holders and lenders) committing funds to an efficient provider of bulk water services, with the same risk profile as GAWB. This can be different from the business's actual cost of capital.

9.2 Context

9.2.1 Financial Market Conditions

One of the key inputs in the WACC is the risk-free rate, which is proxied by the Commonwealth Government bond yield. Around the time of the 2020 Price Monitoring Investigation, Commonwealth Government bond yields were at historical lows, consistent with trends in sovereign government bond yields across the world. The following chart, extracted from the accompanying report by Synergies Economic Consulting (Synergies) (refer Attachment 4), shows trends in the five- and ten-year Commonwealth Government bond yield since 1995.



Figure 9.1 Five- and ten-year Commonwealth Government Bond Yields (1995 to 2023)

Source: Synergies Economic Consulting (2024).89

This also shows the material increase in the yields since 2022, as the domestic and global economies emerged from COVID-19 and inflation expectations accelerated. Assuming no material reversal in this trend, this factor alone can be expected to have a material impact on GAWB's WACC. This in turn will have a material impact on prices given that the return on capital is one of the most material components of GAWB's ARR (refer Chapter 11).

⁸⁹ Synergies Economic Consulting (2024). GAWB's WACC for the 2025-30 Price Monitoring Period, p.17

9.2.2 GAWB's Risk Profile

The benchmark WACC to be applied in GAWB's bulk water prices is being set at a time when the business is facing a large capital investment program. It is therefore essential for the WACC to be adequate to incentivise future investment in bulk water services, having regard to the level of risk inherent in these investments. At the same time, GAWB is conscious of managing customer price impacts.

Under the Capital Asset Pricing Model (CAPM) applied by the QCA, equity investors are only compensated for bearing systematic or non-diversifiable risk. This means that GAWB's WACC does not compensate it for bearing diversifiable risks. This includes the risk of asset stranding, which has an asymmetric profile (i.e., only downside risk), whereas the CAPM assumes that returns are normally distributed. These risks therefore need to be managed by other mechanisms, such as contractual terms. The QCA has also noted that adjustments to the cashflows (including via accelerated depreciation) is another way of addressing this risk.⁹⁰

9.3 Approach

GAWB has estimated its proposed WACC based on the terms of the Referral Notice, referring to the methodologies set out in the QCA's Rate of Return Report.

GAWB has procured an independent report from Synergies on the WACC to apply for the FY2026-30 regulatory period (refer Attachment 4). Noting the terms of the Referral Notice, the brief provided to Synergies was to recommend a WACC that could be considered 'reasonable' based on the QCA's Rate of Return Report.⁹¹

The QCA has clarified the terms for a reasonable estimate as:

For example, suppose a WACC proposal from a regulated entity applies the relevant methods and values set out by us (such as our method for estimating the risk-free rate and adopting our value of gamma) and it also applies the same values for the firm-specific parameters as in previous reviews (such as the same credit rating and gearing). To the extent that there have been no material changes in the overall risk profile and regulatory framework, it may be reasonable to approve such a proposal.⁹²

Any departures from the QCA's preferred position as set out in that report would need to be based on compelling evidence.

The methodologies applied by Synergies (and adopted by GAWB) to estimate benchmark gearing, the return on equity and gamma directly align with the QCA's preferred methodologies as set out in its Rate of Return Report. The differences relate to the trailing average return on debt and are explained in section 9.4.3. In summary, these are as follows.

A ten-year transition will be applied, as stipulated in the Referral Notice. The QCA's
preference is an immediate transition.

⁹⁰ Queensland Competition Authority (2023b). p.20.

⁹¹ Queensland Competition Authority (2023b). section 3.3.

⁹² Queensland Competition Authority (2023b). p.18.

GAWB is proposing the application of a weighted average, based on advice from QTC as
to the most efficient debt management practice to apply and in view of the anticipated
size of the borrowings required to support forecast capital expenditure over the FY202630 regulatory period. The QCA's preference is a simple average.

The WACC estimate is indicative only. The most market sensitive parameters, being the risk-free rate and return on debt, have been estimated at the end of the most recent month prior to lodgement of this submission, being 30 April 2024.

GAWB will do a final update of the WACC just prior to the end of the FY2021-25 regulatory period to ensure that final prices applied from 1 July 2025 are more reflective of prevailing market rates. This approach was adopted by GAWB at the start of the current FY2021-25 regulatory period, with GAWB notifying the QCA of this intent, along with the averaging periods it will apply.⁹³

9.4 WACC Inputs

GAWB's proposal for each of the WACC inputs is summarised below.

9.4.1 Gearing

The current benchmark gearing applied to GAWB is 50% (debt to total assets). In the QCA's Rate of Return Report, it states:94

We will use the current regulatory gearing as a starting point. If there is persuasive evidence that the current benchmark no longer represents efficient gearing, we will determine a new benchmark, having regard to factors such as Australian regulatory precedent, the firm's current risk profile and the gearing of comparator firms. Other Australian regulators consider similar factors in determining regulatory gearing and have generally set regulatory gearing in the range of 50 to 60 per cent.

Synergies has reviewed the benchmark gearing level for GAWB based on an updated analysis of:

- average gearing levels of the sample of energy and water utilities referred to by the QCA
 in its Rate of Return Report (with the exception of Spark Infrastructure and AusNet
 Services, who are no longer listed); and
- recent Australian regulatory decisions for water utilities, where 60% remains the most commonly applied value. Synergies notes GAWB's different risk profile compared to these other water utilities, driven by its concentrated and predominantly industrial customer base.

Synergies concludes that there are no strong grounds to change GAWB's benchmark gearing from 50%.

In view of its large capital investment program, GAWB is likely to need to take on additional borrowings to fund this investment. It is recognised that the benchmark gearing assumption

⁹³ Gladstone Area Water Board (2023). Mid-term Review. GAWB submission section 2.1.1.

⁹⁴ Queensland Competition Authority (2023b). p.22.

applied in its regulated WACC is intended to reflect an efficient long-term target gearing level. Actual gearing can be expected to vary from this over time in line with the business's investment cycle. At this stage there is insufficient evidence to suggest that a change to the long-term target benchmark gearing is required, although GAWB will continue to review this in future price monitoring investigations.

GAWB therefore proposes to maintain a benchmark gearing ratio of 50%.

9.4.2 Return on Equity

Consistent with the QCA's Rate of Return Report, GAWB's return on equity has been estimated based on the Sharpe-Lintner CAPM.95

Risk-free Rate

The risk-free rate has been estimated based on a 20-day average of the ten-year Commonwealth Government bond yield ending 30 April 2024. This is consistent with the QCA's preferred approach in its Rate of Return Report. In terms of the averaging period, the QCA states that this is as nominated by the regulated entity for a period of between 20 and 60 days in length, "ending as close as reasonably possible to the commencement of the regulatory period." ⁹⁶

This results in an estimate of 4.31%. This is a placeholder estimate that will be updated for the purpose of setting GAWB's final prices to apply from 1 July 2025. This could result in a lower or higher value.

Market Risk Premium

In its Rate of Return Report, the QCA's preferred approach to estimate the market risk premium (MRP) is the Ibbotson method.⁹⁷

Based on GAWB's guidance to Synergies, it has used the Ibbotson method. This results in an estimate of 6.5%. GAWB has applied this value for the MRP. This is lower than the value of 7% applied in the current WACC.

Equity Beta

Synergies has undertaken an updated analysis of the equity beta using the method and assumptions set out by the QCA in its Rate of Return Report.⁹⁸ This included:

- a first principles analysis, which is a qualitative assessment of GAWB's systematic risk that can also inform where GAWB's beta might sit relative to comparators;
- a comparable companies analysis, referencing the sample of energy and water utilities used as comparators by the QCA (excluding Spark Infrastructure and AusNet Services);⁹⁹ and

⁹⁵ Queensland Competition Authority (2023b). p.53.

⁹⁶ Queensland Competition Authority (2023b). p.83.

Queensland Competition Authority (2023b). section 6.4.
 Queensland Competition Authority (2023b). section 6.5.

Synergies also applies the Brealey-Myers formula to convert between asset betas and equity betas, as the QCA now prefers this approach to Conine. GAWB considers it important that this change in approach is neutral in terms of the equity

a review of recent regulatory decisions in the water sector.

The first principles analysis concluded that:

- GAWB has a highly concentrated industrial customer base, which has been shown to be sensitive to commodity market conditions, with forecast electricity generation plant closures over the 2025-30 pricing period.
- There are no other aspects of GAWB's services or operations that decrease its systematic risk exposure relative to Seqwater, or to the listed water utilities in the comparator set.
- GAWB's future exposure to the emerging hydrogen industry in the Gladstone region is far more likely to increase its systematic risks than reduce them. 100

Synergies therefore considered that based on this, GAWB's asset betas should be higher than a conventional water utility, such as Seqwater, who has a significant residential customer base. It concluded that there is no evidence to support a revision of GAWB's existing asset beta estimate of 0.45. This translates to an equity beta of 0.78, using the Brealey-Myers formula, a debt beta of 0.12 and benchmark gearing of 50%.

GAWB notes that while it has maintained the same parameter inputs as those applied in the FY2021-25 regulatory period, the resulting equity beta is higher. This is a result of the change in the QCA's preferred re-releveling approach to Brealey-Myers. Synergies also consistently applied this approach in de-levering the equity betas of the comparator sample as part of its review of the asset beta.

GAWB has therefore applied an equity beta of 0.78 in its proposed WACC for the FY2026-30 regulatory period.

Summary: Return on Equity

Based on these inputs, GAWB's indicative return on equity is 9.38%. The only input that it proposes to update prior to the start of the FY2026-30 regulatory period is the risk-free rate, using the same method outlined above.

9.4.3 Return on Debt

Benchmark Credit Rating

GAWB's current regulatory benchmark credit rating is BBB. In its Rate of Return Report the QCA notes that this remains the most commonly applied assumption for regulated water utilities. It also said that its current regulatory credit rating would be the starting point for each business and that it "would require persuasive evidence to justify moving away from this benchmark." ¹⁰¹

GAWB proposes to continue to assume a benchmark credit rating of BBB.

beta outcome (holding all other factors constant), noting that in theory, the choice of approach should have no material impact provided it is consistently applied in delivering and re-levering beta estimates.

Synergies Economic Consulting (2024). pp.30-31.

¹⁰¹ Queensland Competition Authority (2023b). p.38.

Implementation of the Trailing Average Approach

One of the most significant changes resulting from the QCA's Rate of Return Review was the change in its preferred approach to estimate the return on debt, from the 'on-the-day' approach to the trailing average. GAWB is proposing to adopt this change, consistent with the Referral Notice, although there are a number of matters to be considered in its implementation.

GAWB is being advised by QTC on this matter (as it is responsible for the management of GAWB's debt). GAWB notes that QTC has made extensive submissions to regulators on the implementation of the trailing average, including as part of the QCA's 2021 Rate of Return Review. GAWB would be happy to work further with the QCA on workable and transparent arrangements to implement the trailing average approach.

Application of a Transition

The Referral Notice requires the QCA to apply a ten-year transition to the trailing average, consistent with the approach adopted by the AER. The QCA's preferred approach is to adopt an immediate transition, although it has stated that it will consider transition arrangements in "exceptional circumstances." ¹⁰³

In practical terms, the transition means that for the purpose of estimating GAWB's return on debt for the FY2026-30 regulatory period, the starting value for the first year will still be estimated using the on-the-day approach. That is, the rate applied in the first year will be set based on prevailing market interest rates. From the end of the first year of the regulatory period, a portion of GAWB's benchmark debt balance will be progressively refinanced at the then prevailing return on debt. This will continue to occur each year such that by the end of the tenth year, the transition to the trailing average will be completed.

Averaging Approach

In the QCA's Rate of Return Report, the preferred averaging approach is a simple average, meaning that one-tenth of the benchmark debt balance is assumed to be refinanced each year. This in turn assumes that the benchmark efficient entity will manage its refinancing task in this manner.

The approach also assumes that in each year, the updated trailing average return on debt is applied to any new borrowings undertaken in that year. Under the previous on-the-day approach, this could result in a significant mismatch between the (prevailing market) rate at which new borrowings were raised and the regulated return on debt used to set prices. While the trailing average represents an improvement, there can still be a significant mismatch as while any new borrowings undertaken during the period will be raised at the then prevailing market rate, the trailing average return on debt will only reflect one-tenth of that prevailing rate.

The remaining nine-tenths will reflect historical rates. New borrowings cannot be undertaken at historical rates. Investment decisions will be made based on a rate of return that reflects prevailing rates.

https://www.qca.org.au/project/rate-of-return-matters/rate-of-return-review-2021/ {Accessed 29 May 2024}

¹⁰³ Queensland Competition Authority (2023b). p.40.

As noted above, in the FY2026-30 regulatory period, GAWB is likely to be undertaking borrowings to fund investments. Given the size of these borrowings, the mismatch that will occur between a trailing average return on debt based on a simple average, and the actual cost of GAWB's new borrowings, has the potential to be material. When the risk of mismatch is significant, this can reduce incentives to invest.

For some time, QTC has therefore advocated (to the AER and the QCA) that a weighted trailing average approach should be applied. This results in the weight applied to the prevailing return on debt at each annual update reflecting the forecast change in the benchmark debt balance, rather than a simple average.

GAWB notes that the weighted approach means that the compensation of new borrowings undertaken during the regulatory period will transition to the ten-year trailing average in the same manner as the transition for existing debt. That is, initially, these new borrowings are compensated at the prevailing ten-year BBB yield in the relevant year, which then transitions to a ten-year trailing average of the BBB yield over the ten-year transition period. As noted above, under the transition approach existing debt is initially compensated at the prevailing yields at the start of the regulatory period, before transitioning to the ten-year trailing average over a ten-year period.

GAWB considers that given the materiality of this issue in the FY2026-30 regulatory period, and the need for it to implement reasonable measures to manage its financial risks, a weighted trailing average should be applied.

Pricing Implications

With the introduction of a trailing average approach in estimating the return on debt, this necessitates an annual update of the return on debt and subsequently GAWB's WACC that is applied to set prices.

GAWB has limited ability under its commercial arrangements with customers to implement changes to prices within a regulatory period. As part of the QCA's Rate of Return Review, GAWB's submissions highlighted this issue, which was acknowledged by the QCA. It concluded that:¹⁰⁴

We consider the preferred timing of revenue updates may be different for each firm, depending on its individual circumstances. For this reason, our view is not to prescribe a uniform rule on all regulated entities at this time. Instead, we prefer to assess whether to apply annual price adjustments, an end of period true-up or any other arrangements on a case-by-case basis, as part of each individual review process...This approach could be particularly useful in circumstances where light-handed price monitoring suggests a less prescriptive and more flexible approach.

GAWB is therefore proposing an end-of-period adjustment to revenue for the net impact of the annual updates to the trailing average return on debt during the regulatory period. This is the only option available to GAWB given the limitations under its commercial arrangements.

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¹⁰⁴ Queensland Competition Authority (2023b). p.47.

The QCA's Rate of Return Report states that if an end-of-period true-up is required, it will be done on an NPV neutral basis:¹⁰⁵

We propose to apply the regulatory WACC as the discount rate for present value calculations, as it reflects the opportunity cost to the benchmark firm of either receiving funds or paying funds from the 'true-up'.

GAWB proposes that this can be achieved by calculating the cumulative dollar mismatch at the end of each regulatory period, which is then converted to an annual annuity that is added to the ARR in the following price monitoring period.

GAWB is conscious of customer pricing impacts in implementing an end-of-period true-up. However, it also recognises that in practice, the trailing average approach gradually 'smooths' the impact of changes in interest rates between the beginning and end of the regulatory period. This is in contrast to the 'on the day' approach, where the full amount of the difference in the prevailing return on debt at the beginning and end of the regulatory period is reflected in starting prices at the beginning of the next regulatory period.

It is also important to note that the end-of-period true-up related to the annual updating of the cost of debt over the regulatory period can result in either a positive or negative adjustment to future ARRs.

As required, GAWB will work with the QCA as part of this price monitoring investigation on a clear and transparent approach to making this adjustment at the end of each regulatory period. The QCA would then review that adjustment as part of its review of GAWB's proposed allowed revenue and prices for the following regulatory period.

Averaging Periods

The QCA's Rate of Return Report states that its preference is for the regulated business to have the flexibility to nominate an averaging period of a chosen length and timing so that it can manage its refinancing based on business requirements. ¹⁰⁶ It considers that this period should be restricted to be the 12 months between 1 April and 31 March in advance of the next regulatory year, to enable sufficient time to implement the update before the start of the applicable year.

GAWB will confidentially notify the QCA of its proposed averaging periods for the annual updates to the trailing average return on debt for the FY2026-30 regulatory period, consistent with the QCA's Rate of Return Report.

Extrapolation Approach

The QCA's preference is to use the RBA's ten-year BBB yields to estimate the return on debt. As the average tenor of these yields tends to be less than ten years, it applies linear extrapolation to enable it to estimate a ten-year yield.¹⁰⁷

¹⁰⁵ Queensland Competition Authority (2023b). p.43.

 $^{^{\}rm 106}\,$ Queensland Competition Authority (2023b). p.43.

¹⁰⁷ Queensland Competition Authority (2023b). p.39.

As recognised in the QCA's Rate of Return Report, the RBA recently ceased publishing corporate bond spreads to the swap curve, as well as the Commonwealth Government Securities (CGS) yield curve. In providing its advice to GAWB on the implementation of the trailing average, QTC has reviewed the estimation of the return on debt as a consequence of these changes and has identified an issue with the QCA's preferred extrapolation approach. While the RBA no longer publishes the corporate bond spreads, the QCA still extrapolates the debt risk premium. It calculates this debt risk premium by deducting the RBA's published seven- and ten-year CGS yields from its seven- and ten-year BBB yields.

QTC has highlighted to GAWB that because the average tenor of the RBA's BBB yields is less than the target tenor (that is, is less than seven and ten years)¹⁰⁸, deducting the RBA's seven and ten year CGS yields from BBB yields that have shorter effective tenors results in a downward bias.¹⁰⁹ If it were unbiased, the effective tenor of the BBB yield and corresponding CGS yield would be the same. QTC has advised that this issue can be addressed by applying the extrapolation to the RBA's seven and ten year (total) BBB yields and effective tenors, rather than the debt risk premium.

GAWB sees potential merit in the alternative approach outlined by QTC. However, in estimating the WACC for the FY2026-30 regulatory period it will apply the QCA's preferred approach unless the QCA finds this alternate approach to be more appropriate for GAWB to implement. This may be a matter that is addressed at the QCA's next review of its rate of return approach, including stakeholder consultation.

Debt Risk Premium Estimate

Synergies has estimated the debt risk premium based on the QCA's Rate of Return report, sourcing data from the RBA and applying the QCA's preferred approach to linear extrapolation. For the 20-day period to 30 April 2024, the resulting estimate is 1.96%.

Debt Raising Costs

GAWB has applied an allowance for debt raising costs of 10 basis points per annum, which is the QCA's current preferred value.¹¹⁰

Summary: Return on Debt

Based on these inputs, GAWB's indicative return on debt is 6.37%. This will be updated prior to the start of the FY2026-30 regulatory period, along with the risk-free rate. This initial return on debt will be used to set prices that will apply over the FY2026-30 regulatory period. Subsequent annual updates to the return on debt will be used to determine any associated end-of-period adjustment that will be made against the ARR for the next regulatory period commencing 1 July 2030.

¹⁰⁸ This is particularly the case for the ten year BBB yield.

¹⁰⁹ Assuming a normal upward sloping yield curve.

9.4.4 Gamma

GAWB has applied the QCA's preferred value for gamma of 0.484, which reflects a distribution rate of 0.88 and utilisation rate of 0.55.¹¹¹

9.5 Summary: Indicative Benchmark WACC

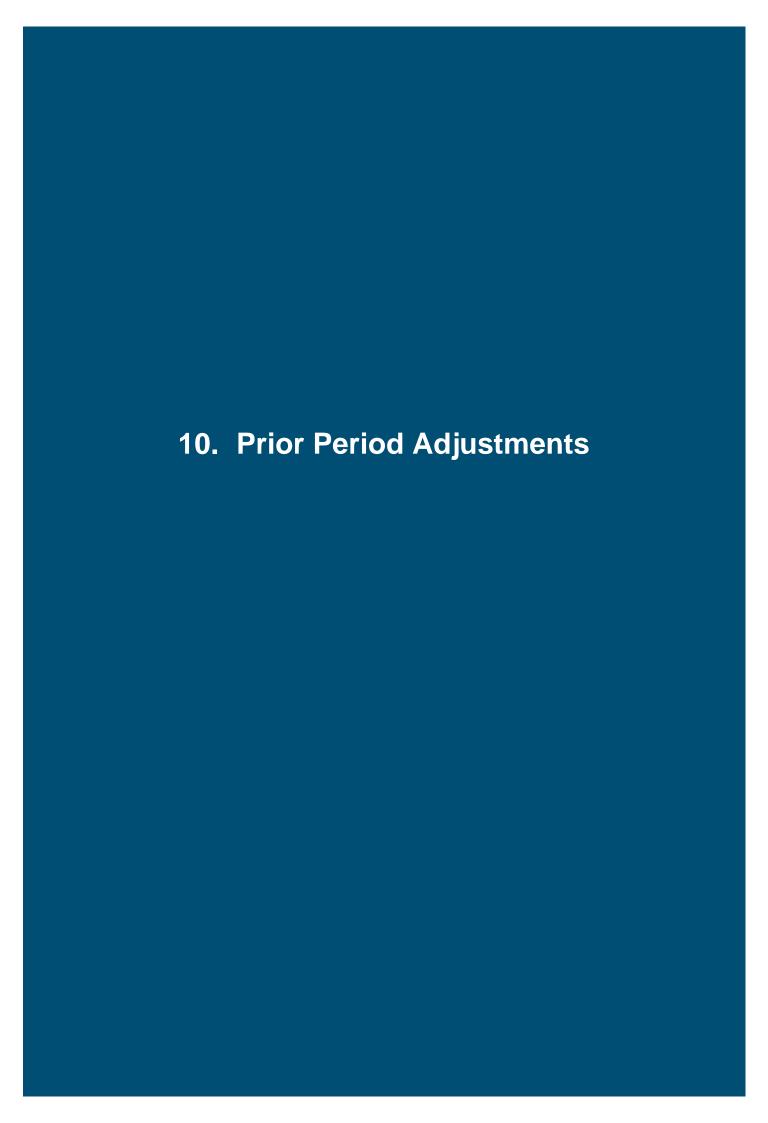
The following table summarises GAWB's indicative WACC estimate, along with the current WACC used to set final prices from 1 July 2020. The indicative WACC is based on a twenty day averaging period ending 30 April 2024. It will apply for the first year of the FY2026-30 regulatory period. The return on debt will then be updated annually under the trailing average approach, with the resulting adjustment to be applied as an end-of-period true-up.

Table 9.1 Indicative WACC

Parameter	Current	Proposed indicative (2025-26)
Risk-free rate	0.91%	4.31%
Gearing	50%	50%
Market risk premium	7.0%	6.5%
Asset beta	0.45	0.45
Debt beta	0.12	0.12
Equity beta	0.73	0.78
Credit rating	BBB	BBB
Debt risk premium	2.45%	1.96%
Debt raising costs	0.108%	0.100%
Gamma	0.484	0.484
Return on equity	6.01%	9.38%
Return on debt	3.47%	6.37%
Post-tax nominal (vanilla) WACC	4.740%	7.875%

¹¹¹ Queensland Competition Authority (2023b). p.87.

As evident from the above table, the increase in the WACC is primarily driven by the material increase in the risk-free rate. This is a function of financial market conditions and is beyond GAWB's control.



At each reset of prices, adjustments must be made to take account of differences between specific forecasts used to set revenues for the current regulatory period and actual revenue collected from customers during that period.

10.1 Introduction

At each reset of prices, adjustments must be made for:

- additional revenue as a result of the levying of over-run charges;
- additional revenue received via the levying of short-term contract length premiums;
- additional revenue received via the levying of the Capacity Preservation Fee (CPF) that is not to be rebated to an individual customer (refer Chapter 12);
- revenue cap adjustments; and
- accelerated depreciation associated with asset disposals.

These adjustments are offset against the calculation of the ARR for the subsequent regulatory period, in this case, the FY2026-30 regulatory period.

All of the above adjustments are reliant on actual data. At the time of drafting, GAWB is able to confirm the adjustments required for the first three years of the current regulatory period where actual data is available (i.e., 2020-21 to 2022-23). For the remaining years (i.e., 2023-24 and 2024-25) no adjustments have been included.

Table 10.1 Prior Period Adjustments (\$M, 2023-26)¹

Over-run charges	1.86
Short-term contract length premiums	0
Revenue cap adjustments	0
Asset disposals and accelerated depreciation	(1.29)
Capacity Preservation Fee	0
Total Adjustment	0.56

- 1. A positive amount in the table above results in a reduction in ARR.
- 2. Adjustment amounts collected over 2020-21 to 2022-23 have been rolled forward to 1 July 2025\$s.
- 3. Numbers may not add due to rounding.

Adjustments for the 2023-24 year will be made to the values summarised in Table 10.1 once actual data becomes available. These adjustments will be contained in GAWB's response to the QCA's Draft Report.

GAWB will further update the prior period adjustments for actual data for the 2024-25 year up to the end of May 2025, just prior to the finalisation of prices. This will ensure that the prior period adjustments are based on actual data for most of the FY2021-25 regulatory period, except the month of June 2025. Any adjustment amounts for June 2025 will be taken into account in the assessment of prior period adjustments in the following regulatory period (i.e., the period commencing 1 July 2030).

This approach provides better certainty for GAWB and its customers as variability in future revenue is minimised. It also aligns with the approach taken in the FY2021-25 regulatory

period where the prior period adjustments were based on actual data up to the end of May 2020.

In determining the prior period adjustment amount to be offset against the ARR for the FY2026-30 regulatory period, actual data for June 2020 has been taken into account.

10.2 Proposed Adjustments

10.2.1 Over-run Charges

Following the QCA's 2005 Investigation of Pricing Practices, the Minister accepted GAWB's proposal that over-run charges may be applied to customers where actual demand exceeds the contracted/reserved volume. The over-run charges are applicable to all components of GAWB's water tariffs – storage, delivery and administration.

The objective of these charges is to increase customer accountability for demand and to incentivise more accurate estimation of consumption (which is important given the 'lumpy' nature of capital investments required if estimated consumption exceeds existing capacity). The QCA has also accepted GAWB's approach of retaining any additional costs associated with the delivery of this additional consumption.¹¹³

Given this charge is a disincentive or surcharge, rather than a cost-reflective charge, it may result in GAWB recovering revenue in excess of the efficient costs associated with providing the additional water. The materiality of an associated additional costs to serve the additional demand is dependent on the size, location and persistence of the additional demand.

Consistent with the QCA's approach, any additional revenue received from the levying of overrun charges over a regulatory period will be returned to customers, net of any (efficient) increase in costs that are caused by the additional demand. This additional revenue is also excluded from the assessment of the revenue cap adjustment (see section 10.2.4)

For the 2021-22 to 2022-23 years, over-run charges for storage, administration and delivery services were levied to some customers, totalling \$1.53 million. GAWB confirms this amount:

- has been excluded from the revenue cap adjustment for the FY2021-25 regulatory period;
 and
- will be rolled forward at the current WACC (i.e. 4.74% per annum) and offset against the administration component of GAWB's ARR for the FY2026-30 regulatory period.

Based on historic usage over the current FY2021-25 regulatory period, further over-run charges are anticipated for the remaining two years (2023-24 and 2024-25). As detailed above, prior to the finalisation of prices to apply for the FY2026-30 regulatory period, GAWB will update the amount of the overrun charges to account for all overrun charges received up to May 2025.

¹¹² Queensland Competition Authority (2010). Gladstone Area Water Board: Investigation of Pricing Practices - Final Report, June. p.33.

¹¹³ Queensland Competition Authority (2020). p.127.

10.2.2 Short-term Contract Length Premiums

Prices are currently differentiated on the basis of contract length, to the extent there are differences in identifiable risks and costs. In the QCA's 2010 Investigation of Pricing Practices, it acknowledged that while it has no role in approving contract terms and conditions, short term contracts were riskier than long term contracts. In recognition of these risks, the following premiums were introduced:¹¹⁴

- 25% for contracts of 2 years or less
- 20% for contracts of 2 to 5 years
- 10% for contracts of 5 to 10 years
- 5% for contracts of 10 to 15 years
- 3% for contracts of 15 to 20 years.

Further clarification on the treatment of this additional revenue was provided by the QCA in its 2015 Price Monitoring Investigation, where it advised that:¹¹⁵

Revenue from surcharges (net of GAWB's costs) should be refunded to customers in the next regulatory period. Refunded surcharges should be offset against the administration charge.

This position, where additional revenues from surcharges are returned to customers, is inconsistent with the initial premise that short-term contracts are riskier than long-term contracts. As a result, this risk to GAWB effectively remains uncompensated.

GAWB has accepted this approach in the past and proposes to continue to apply this for the FY2026-30 regulatory period. However, GAWB does not believe this is the best approach.

As noted above, the premiums are deducted from the administration component of the initial ARR in the relevant pricing zone for the start of the next regulatory period. Consistent with the treatment of over-run charges, GAWB considers that revenue from contract length premiums should also be excluded from the assessment of the revenue cap adjustment (refer section 10.2.4).

At the start of the FY2021-25 regulatory period, GAWB made the decision not to levy the short-term contract length premium. As such, there is no relevant amount to offset against the ARR for the FY2026-30 regulatory period.

10.2.3 Capacity Preservation Fee

GAWB has introduced a new ancillary charge called the Capacity Preservation Fee (CPF). The CPF is intended to provide an economic price signal of constrained supply capacity and discourage capacity hoarding by new water seekers. The CPF applies (in appropriate circumstances) for the period that GAWB would have to hold the capacity for a customer (i.e.,

¹¹⁴ Queensland Competition Authority (2010). p.53.

Queensland Competition Authority (2015). Gladstone Area Water Board: Price Monitoring 2015-20 – Final Report, May. p.71.

at the allotment of the capacity), until such time as the ultimate reservation amount under a water supply contract is reached.

Once a customer starts paying for water via GAWB's bulk water charges, the CPF amount GAWB has received is returned to that customer by way of an offset against the customer's monthly bulk water storage charges. In specific circumstances, where the capacity allotted to the customer is relinquished by that customer, either in part or in full, GAWB retains the associated portion of the CPF not yet rebated to the customer.

In this instance, the amount of the CPF that is retained by GAWB (net of any additional costs incurred by GAWB) is treated as a prior period adjustment and offset against the ARR in the relevant pricing zone (i.e., the Awoonga pricing zone)¹¹⁶ in the subsequent regulatory period.

Consistent with the treatment of over-run charges and short-term contract length premiums, GAWB considers that revenue from the CPF should be excluded from the assessment of the revenue cap adjustment. This is because the full amount of revenue received by GAWB is either rebated back to the specific customer that paid the fee or, in the case of CPF amounts being retained by GAWB, returned to all customers by way of an offset against the ARR in the next regulatory period.

The CPF was introduced in July 2023. For the 2021-22 to 2022-23 years, no revenue associated with the CPF has been received by GAWB.

The CPF has been levied to a number of new customers in 2023-24 and it is expected this will continue. GAWB currently anticipates that all the revenue collected via the CPF over the current FY2021-25 regulatory period will be rebated back to the relevant customers in due course and therefore, no amount is expected to be captured in the prior period adjustment to apply to the FY2026-30 period.

10.2.4 Revenue Cap Adjustments

For the FY2016-20 regulatory period, the QCA considered that the most appropriate form of regulation for GAWB was a hybrid revenue cap. 117 Under this arrangement, GAWB bears the revenue risk within a \pm 10% dead-band on all regulated activities except water delivery (i.e., network) services (refer Chapter 13). This form of regulation, with symmetrical 10% dead-bands, has been applied in the assessment of the revenue cap adjustment for the FY2021-25 period.

GAWB has assessed the revenue cap for the FY2021-25 regulatory period up to the end of the most recently completed financial year (2022-23). In determining the revenue cap amount, GAWB has:

Any CPF amount included as a prior period adjustment is offset against the Awoonga pricing zone as the CPF is relevant to and based on the cost of storing water at Awoonga Dam.

¹¹⁷ Queensland Competition Authority (2015). section 7.2.

A reassessment of the revenue cap for 2019-20 has also been done, taking into account actual revenue received in 2019-20. This has not changed the revenue cap assessment for the 2019-20 year that was included in the prices for the FY2021-25 regulatory period.

- included all revenue received over these years from storage, administration, delivery charges; and
- excluded all revenue received over these years from overrun charges, contract length premiums and CPFs; and
- fixed prices over these years in real terms (i.e., except for CPI increases) for the length of the regulatory period to determine the ARR and associated dead-bands.

For the 2020-21 to 2022-23 years, GAWB had an over recovery of revenue (compared to the ARR). However, the amount of that over recovery has remained within 10% of the ARR for each year. Figure 10.1 provides an overview of the revenue cap assessment over the FY2026-30 regulatory period. GAWB does not expect there to be an under- or over-recovery of revenue in the remaining two years of the FY2021-25 regulatory period that would place it outside the 10% dead-bands. This will be confirmed when final prices are set prior to the start of 2025-26.

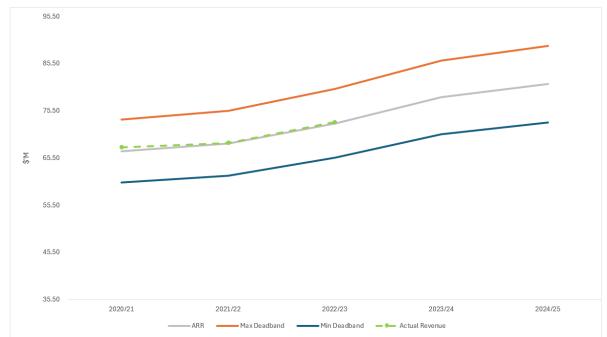


Figure 10.1 Revenue Cap Analysis 2020-21 to 2022-23

10.2.5 Asset Disposal and Accelerated Depreciation

The QCA has recognised that:119

A key issue in applying brownfields optimisation is that, over time, assets that, even if initially prudent and optimal, may become redundant or sub-optimal due to changes in technology, demand expectations or other circumstances. The Authority's general approach is not to optimise these investments without some form of compensation to the service provider unless the regulator had previously been misled in some way, if there are actual bypass options or other issues in relation to customers' capacity to pay, or there is a need for other reasons to

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¹¹⁹ Queensland Competition Authority (2005). p.95.

promote outcomes in downstream or upstream markets that are consistent with those of properly functioning competitive markets.

GAWB identifies assets that are no longer required for the provision of its services. These assets are subject to early disposal and removed from the RAB.

As GAWB may not have recovered its full return (on and of capital) for these assets, in accordance with the above principles the QCA has historically permitted the application of accelerated depreciation. This is to ensure GAWB is fully compensated for those costs. It has therefore previously accepted the inclusion of the revenue required to accelerate the recovery of these assets in the prior period adjustments. This value is net of any proceeds GAWB may have received from the sale of those disposed assets.

GAWB considers it important that these adjustments are clear and transparent.

Adjustments for Forecast Disposals

During 2019-20, GAWB was finalising the sale of its office building at 147 Goondoon Street, Gladstone. Given the sale of the building was not expected to be completed, and the sale price known, until after pricing had been finalised for the FY2021-25 regulatory period, GAWB proposed to capture the eventual disposal of the asset as part of the RAB roll-forward and revenue adjustment at the end of the FY2021-25 period.¹²⁰

In its 2020 Final Report, the QCA considered that: 121

GAWB should make an appropriate adjustment through an asset disposal to the amount of the expected minimum sale price of 147 Goondoon Street before setting final prices for 2020-25... Once the sale of 147 Goondoon Street has been finalised, an adjustment can be made for the realised sale value as part of the RAB roll-forward at the end of the relevant regulatory period.

Whilst GAWB had expressed concerns with this approach,¹²² it adopted the QCA's approach. It therefore recognised the anticipated disposal of the 147 Goondoon Street property in the RAB and made the associated adjustments for the accelerated depreciation and proceeds of sale in setting final prices to apply from 1 July 2020. This was done in accordance with the approach outlined in GAWB's response to the QCA's Draft Report.¹²³

Since this time, the sale of the 147 Goondoon Street property has been finalised and the actual asset disposals and proceeds of sale are known. An adjustment for the difference between the actual and forecast value of the accelerated depreciation associated with this asset has been made in the prior period adjustments to apply in the FY2026-30 regulatory period.

Additionally, an adjustment for the difference between the actual and forecast value of accelerated depreciation in the last year of the prior regulatory period (i.e., 2019-20) has also

¹²⁰ Gladstone Area Water Board (2020). 2020 Price Monitoring Investigation, Response to the QCA Draft Report, Part A: Overview, March, section 4.1.1.

¹²¹ Queensland Competition Authority (2020). p.56.

¹²² Gladstone Area Water Board (2020), section 4.1.1.

¹²³ Gladstone Area Water Board (2020). p.46.

been made as disposals for 2019-20 were based on a forecast at the time of finalising prices for the FY2021-25 period.

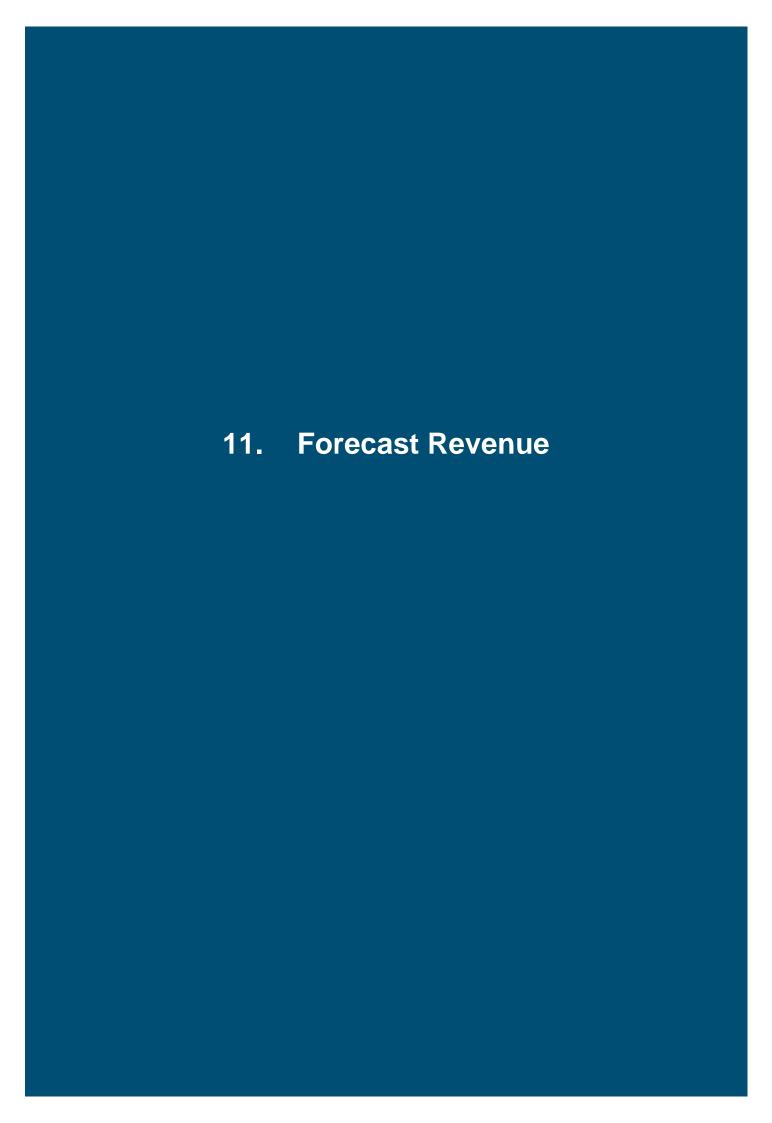
Accelerated Depreciation for FY2021-25

Over the current regulatory period early disposal of assets has occurred resulting in RAB disposals of \$3.90 million. 124,125 Net of any sale proceeds, the application of accelerated depreciation to those assets as at 1 July 2025 would result in additional revenue totalling \$1.29 million. 126 At this stage, GAWB is not including a forecast of future disposals for the remaining two years of the FY2021-25 regulatory period. A final assessment of actual disposals and associated accelerated depreciation for the FY2021-25 period will be made when prices are set just prior to the commencement of the 2025-26 year.

This includes any assets that were disposed of in 2019-20 that were not captured in the accelerated depreciation adjustment made at the start of FY2021-25 period. These disposals have been captured in the RAB in 2020-21 and 2025-26

¹²⁵ This is the value of the asset disposals as at 1 July 2025 and excludes Curtis Island.

This includes any adjustments due to the reconciliation of accelerated depreciation associated with disposed assets in 2019-20 and for the disposal of the property at 147 Goondoon St.



GAWB has calculated the ARR that will enable it to recover its Allowable Costs over the FY2026-30 regulatory period. This applies the standard regulatory building block approach, consistent with the terms of the Referral Notice and past practice. GAWB's total forecast ARR for the FY2026-30 regulatory period is \$607.49 million (in net present value terms i.e. \$2026). This Chapter sets out the ARR that will enable GAWB to recover its Allowable Costs over the FY2026-30 regulatory period.

11.1 Methodology

A building block approach has been used to calculate GAWB's ARR for the FY2026-30 regulatory period. This approach is the standard regulatory approach applied by the QCA and other Australian regulators.

The key components used in the building block approach to determine GAWB's proposed ARR aligns with the definition of Allowable Costs contained in the Referral Notice. The ARR is then used to calculate the prices to apply for the FY2026-30 regulatory period, which is set out in Chapter 12.

As defined under the Referral Notice, GAWB's prices are to be set to allow GAWB sufficient Allowable Revenue to recover the Allowable Costs of providing GAWB's Monopoly Business Activities.

11.2 Proposed ARR

Based on the inputs outlined in the preceding chapters, GAWB's forecast ARR for the FY2026-30 regulatory period is shown below.

Table 11.1	Proposed An	nual Revenue	Requirement ¹	(\$M_nominal)	
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	2025-26	2026-27	2027-28	2028-29	2029-30
Operating expenditure	44.23	46.09	48.85	50.99	54.56
Return on capital ²	66.12	78.43	92.38	97.43	98.77
Return of capital ³	5.17	5.92	7.85	9.98	10.77
Taxation ⁴	4.07	3.13	3.18	5.34	10.28
Other revenue adjustments ⁵	(6.16)	(5.75)	(5.90)	(6.05)	(6.21)
Total ARR ⁶	113.43	127.83	146.35	157.69	168.17

- 1. These are unsmoothed annual revenue amounts.
- 2. Includes return on working capital.
- 3. This is also referred to as 'regulatory depreciation', being depreciation less indexation of the RAB, to avoid the double-counting of inflation.
- 4. Net of imputation credits.
- 5. Includes revenue GAWB receives from services other than bulk water services, any rebates for capital contributions and prior period adjustment amounts.
- 6. Numbers may not add due to rounding.

There has been a significant uplift in the ARR in the FY2026-30 regulatory period compared to that of the FY2021-25 regulatory period. There are a number of factors that have led to this increase. The most significant of these includes:

- increase in the WACC (refer Chapter 9);
- increase to GAWB's operating costs (refer Chapter 7); and
- capital forecast for the FY2026-30 regulatory period (refer Chapter 8).

As part of its submission to the QCA, GAWB has provided a copy of its revenue and pricing models that demonstrates the build-up of GAWB's ARR.

12. Tarriff Structure and Prices

GAWB's existing zonal multi-part tariff structure has been designed to reflect the operational and physical structure of GAWB's network. It also provides transparency to individual customers as to the costs that are relevant to the delivery of their services. In its 2020 Final Report the QCA acknowledged the benefits of GAWB's pricing structure, however it also questioned whether a simpler approach could be applied.

The material change to GAWB's network that will occur as a result of hydrogen-related investments necessitates a comprehensive review of GAWB's pricing structure, and provides an opportunity to reassess the balance between simplicity and cost reflectivity. However, it is neither appropriate, not feasible, to undertake such a review in the lead-up to, or as part of, the 2025 Price Review. It will also require extensive customer and stakeholder engagement. GAWB therefore intends to undertake a detailed review of its pricing arrangements during the FY2026-30 regulatory period.

As outlined in Chapter 11, GAWB is forecasting a significant increase in its ARR to fully recover its efficient costs in the FY2026-30 regulatory period. This chapter presents the indicative prices that will recover this forecast ARR.

12.1 Referral Notice

Consistent with the approach that has been applied to date, the Referral Notice defines Appropriate Prices as being consistent with Allowable Costs and Reserved Demand. It continues to prescribe the application of price smoothing over the FY2026-30 regulatory period and that prices will:

...allow GAWB sufficient Allowable Revenue to recover the Allowable Costs of providing the Monopoly Business Activities.

The Referral Notice does not otherwise stipulate any other requirements in relation to the actual structure of GAWB's prices.

12.2 Structure of Prices

12.2.1 Overview of Existing Pricing Approach

GAWB currently has a multi-part tariff structure that is applied across a number of pricing zones to reflect the operational and physical structure of GAWB's network. As the QCA has previously observed:¹²⁷

Zonal prices are also more cost-reflective than average-cost pricing and therefore should promote more efficient consumption decisions by GAWB customers.

This means that what customers pay is more closely aligned to the services they receive and the assets that are required to deliver those services.

The current pricing zones are shown below in Table 12.1.

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¹²⁷ Queensland Competition Authority (2020). p.120.

Awoonga Awoonga to Toolooa Boyne Island Toolooa to Central Raw Fishermans Fitzsimmons Landing Raw QAL Fitzsimmons to Gladstone 唰 WTP Gladstone Gladstone City ъ Б 略 Interconnection Gladstone WTP to South Gladstone Calliope E S REP. Boyne Island South Gladstone to North Industrial **Fishermans** Potable Toolooa Island Landing Potable Potable Benaraby **Boat Creek to** East End E S KEY: DAM RAW POTABLE WATER TREATMENT WATER WATER PLANT

Figure 12.1 GAWB's Current Pricing Zones

The key components of GAWB's pricing structure are summarised in the following table.

Table 12.1 Components of GAWB's Pricing Structure

Component	What it comprises
Storage charges (two-part tariff)	 A storage volumetric charge, which has historically been set based on the Long Run Marginal Cost (LRMC) for volumes sourced from Awoonga Dam. This is calculated based on forecast annual volumes (ML).
	 A storage access charge, which recovers the remaining ARR associated with storage, that is not recovered by the storage volumetric charge. This is calculated based on reserved annual volumes (ML).
Delivery charges (three- part tariff)	A delivery volumetric charge, reflecting variable operating costs. This is calculated based on forecast annual volumes (ML).
	 A delivery metered Maximum Daily Quantity (MDQ) volumetric charge, which has historically been set based on the LRMC of deliver capacity. This is calculated based on forecast aggregate MDQ.
	 A delivery access charge, which recovers the part of the remaining ARR associated with delivery, which is not recovered via the deliver volumetric charges. This is calculated based on reserved MDQ.
Administration	This recovers GAWB's common corporate overhead costs that cannot be allocated to a particular pricing zone. These costs have been allocated between storage, raw and treated water services in accordance with the method established in the QCA's initial pricing practices investigation for GAWB in 2002.

As evident from the above table, the storage and delivery charges contain a fixed and volumetric component. The fixed component is based on reserved (or contracted) volumes, while the volumetric component reflects actual usage. At the start of the regulatory period, prices will be set to recover forecast ARR based on forecast volume. The actual revenue GAWB recovers from the volumetric components will vary to the extent that actual usage differs from forecast volume. This exposes GAWB to volume risk, subject to its form of regulation, which is currently based on a hybrid revenue cap (refer Chapter 13).

Ancillary Charges

GAWB may also levy the following:

Over-run charge. This is a surcharge applied where actual volumes exceed a specified threshold above reserved volumes. This applies to the three main tariff components – storage, delivery and administration – and is intended to encourage accurate contracting. Any additional revenue received from over-run charges is currently returned to customers, net of any (efficient) increase in costs incurred by GAWB in servicing that additional demand.

- Contract length premium. This is levied on a sliding scale, with the highest premium applied to the shortest contracts (i.e., with a term of two years or less) and the lowest to the longest contracts (i.e., with a term of 15 to 20 years). This reflects that shorter term contracts expose GAWB to higher commercial and financial risks. Any additional revenue received from contract length premiums is currently returned to customers, net of any associated costs incurred by GAWB.
- Capacity Preservation Fee. This charge was introduced in July 2023. When supply capacity is scarce, it may be applied for the period that GAWB has to hold supply capacity for a customer (i.e., at the offering of a water supply proposal and the allotment of the capacity), until such time as a water supply contract (WSC) becomes unconditional and the ultimate reservation amount under the WSC is reached. The intent is to provide an economic signal to water seekers when supply capacity is scarce and discourage capacity hoarding. When the customer commences paying for water, the revenue collected is offset against the customer's water storage charges payable under its WSC. If the reserved capacity is reduced or the customer does not enter into a WSC, the revenue recovered is returned to all customers at the start of the next regulatory period. This ensures that GAWB does not retain any benefit from this charge.

These charges do not provide for the recoupment of the ARR and are ancillary charges to GAWB's bulk water tariffs. As noted above, any additional revenue received from these charges is returned to customers (refer Chapter 10) in the subsequent regulatory period, net of any associated costs incurred by GAWB (including any tax payable on the amounts). Any revenue received is also excluded from the calculation of the revenue cap adjustment.¹²⁸

12.2.2 Proposed Approach for the FY2026-30 Regulatory Period

GAWB is not proposing to change the application of zonal/nodal pricing or the structure or method of calculating the bulk water tariffs, or any ancillary charges, for the FY2026-30 regulatory period (refer section 12.2.3). It has introduced a number of additional pricing zones.

As set out in Chapter 5, GAWB's demand forecasts for the FY2026-30 regulatory period includes the commencement of water supply to new customers. These new customer connections sit outside GAWB's existing delivery network and therefore cannot be captured under the current set of pricing zones.

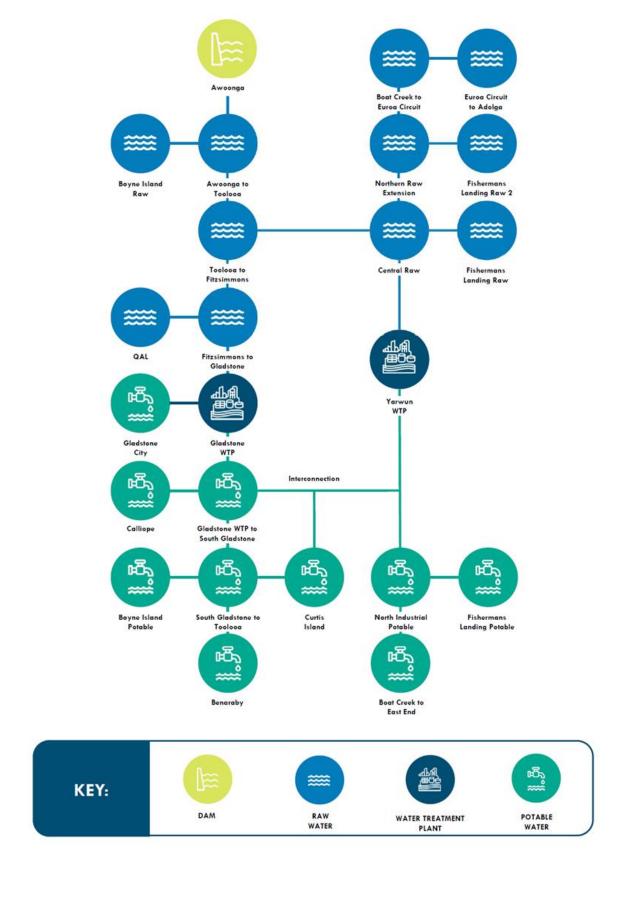
Additional pricing zones have been included for the FY2026-30 regulatory period to capture the costs associated with these new customer connections. The new pricing zones are:

- Boat Creek to Euroa Circuit
- Euroa Circuit to Aldoga
- Fisherman's Landing Raw 2
- Northern Raw Extension.

The pricing zones for the FY2026-30 regulatory period are shown below in Figure 12.2.

¹²⁸ In the case of over-run charges, where the over-run has caused a material increase in GAWB's costs, the revenue cap may be increase by the additional cost. Refer: Queensland Competition Authority (2020). p.127.

Figure 12.2 GAWB's Pricing Zones – FY2026-30 Regulatory Period



12.2.3 Review of GAWB's Pricing Structure

In its 2020 Final Report, while acknowledging the benefits of GAWB's current pricing practices, the QCA described them as "quite granular and complex." 129 It commented that: 130

Simpler pricing practices would aid transparency and comprehension for customers. However, we acknowledge that GAWB's business is unique in terms of its predominantly industrial customer base.

Noting the changes that have occurred since GAWB's initial pricing practices review in 2002, the QCA concluded the pricing structure should remain unchanged and that for future price reviews GAWB "should try to find an optimal compromise so that its pricing practices balance simplicity and cost reflectivity." ¹³¹

GAWB acknowledges the observations made by the QCA in its 2020 Final Report. Due to the breadth of issues to be considered and the need to undertake a thorough consultation process, GAWB took the view that a review would be undertaken if there was one or several material factors to justify a review (and the associated costs). As noted in Chapter 3 GAWB is going through a transformational period, which necessitates a comprehensive review of GAWB's pricing structure, and provides an opportunity to reassess the balance between simplicity and cost reflectivity.

For the reasons outlined below it is neither appropriate, nor feasible, to undertake such a review in the lead-up to, or as part of, the 2025 Price Monitoring Investigation.

First, there is still uncertainty in respect of important matters that will influence the pricing structure, including in relation to hydrogen developments.

Second, a comprehensive review will take time to undertake properly. This would commence with a review of the pricing objectives, which would become the criteria used to assess alternatives (including the status quo). A starting point for this will be the pricing principles contained in GAWB's current WSC, which also accords with recommendations and findings from previous QCA price investigations. The objectives will include, although will not be limited to, simplicity and cost reflectivity.

Further, it would then require the specification and analysis of alternatives, including modelling the potential impact on customers, as well as GAWB's risk profile.

Most importantly, such a review will require extensive consultation with customers (existing and new) and stakeholders, including Government and the QCA. Any change in pricing approach has the potential to create (or at least be seen to create) 'winners' and 'losers'. It is therefore important to have sufficient time to effectively engage with customers in explaining options and enabling them to understand the potential impacts on their business. Customers will also need sufficient time to manage the impact of any change on their business.

¹²⁹ Queensland Competition Authority (2020). p.118.

¹³⁰ Queensland Competition Authority (2020). p.118.

¹³¹ Queensland Competition Authority (2020). pp.118-119.

GAWB anticipates that such a review could take a number of years to complete. Based on the current outlook, as well as the expected timing of the next price monitoring investigation towards the end of the FY2026-30 regulatory period, this review is expected to commence in 2025-26.

As discussed in Chapter 7, GAWB has proposed a step change for the costs of undertaking this review.

12.3 Indicative Prices

GAWB has developed indicative prices based on the above framework and the forecast ARR required to recover GAWB's efficient costs, as set out in Chapter 11. These prices are provided for information only, to assist customers to understand the impact of key inputs and forecast values explained in this submission.

As actual prices are subject to each customer's individual commercial arrangements with GAWB, consistent with past practice, GAWB will provide supplementary information on the potential pricing impacts to its customers. This includes meeting with each customer as required.

The indicative prices payable by customers sourcing water from each pricing zone are presented for the first year of the FY2026-30 regulatory period (2025-26). This includes the four new pricing zones described above. Prices will be adjusted annually by CPI.

Table 12.2 Proposed Indicative Prices¹ – from 1 July 2025 (\$2026²)

Pricing Zone	Reservation Storage	n and	Delivery		Admin	Average price
	Storage access (\$ per reserved ML)	Storage volumetric (\$ per metered ML)	Delivery access (\$ per reserved MDQ) ³	Delivery volumetric (\$ per metered ML)	(\$ per reserved ML)	(\$ per reserved ML)
Awoonga	691.76	2.29	-	-	54.43	748.08
Awoonga to Toolooa	691.76	2.29	9,507.14	53.30	163.30	1,296.02
Toolooa to Fitzsimmons	691.76	2.29	12,229.06	53.30	163.30	1,408.39
Boyne Raw	691.76	2.29	36,753.92	53.30	163.30	2,505.98
Central Raw	691.76	2.29	15,644.04	53.30	163.30	1,539.77
Fitzsimmons to Gladstone	691.76	2.29	13,096.37	53.30	163.30	1,446.09
QAL	691.76	2.29	16,778.96	53.30	163.30	1,597.28
Fishermans Landing Raw	691.76	2.29	22,668.56	54.08	163.30	2,101.33

Pricing Zone	Reservation Storage	n and	Delivery		Admin	Average price
Boat Creek to Euroa Circuit	691.76	2.29	493,711.42	388.01	163.30	17,601.54
Euroa Circuit to Aldoga	691.76	2.29	598,582.18	388.01	163.30	21,049.35
Fishermans Landing Raw 2	691.76	2.29	335,670.20	313.02	163.30	12,305.76
Northern Raw Extension	691.76	2.29	291,085.52	313.02	163.30	10,839.96
Gladstone WTP	691.76	2.29	35,847.74	180.97	381.03	2,818.96
Gladstone City	691.76	2.29	40,143.14	180.97	381.03	2,985.16
Gladstone WTP to South Gladstone	691.76	2.29	43,360.45	181.04	381.03	3,170.16
Calliope	691.76	2.29	65,667.76	205.94	381.03	3,969.95
South Gladstone to Toolooa	691.76	2.29	53,829.43	186.17	381.03	3,615.15
Boyne Potable	691.76	2.29	74,115.99	186.61	381.03	4,449.17
Benaraby	691.76	2.29	96,424.33	224.23	381.03	5,673.22
Yarwun WTP	691.76	2.29	46,466.87	169.21	381.03	3,884.71
North Industrial Potable	691.76	2.29	58,055.30	173.11	381.03	5,041.86
Fishermans Landing Potable	691.76	2.29	106,704.75	173.11	381.03	9,369.82
Boat Creek to East End	691.76	2.29	204,520.63	331.38	381.03	22,284.28

- 1. Prices are exclusive of the prices applicable to the Curtis Island Pricing Zone.
- 2. These prices are indicative of the price a customer will pay for water taken in the relevant pricing zone.
- 3. Delivery access charges are shown as monthly amounts (\$/MDQ). The annual \$/MDQ price is 12 times this monthly amount.

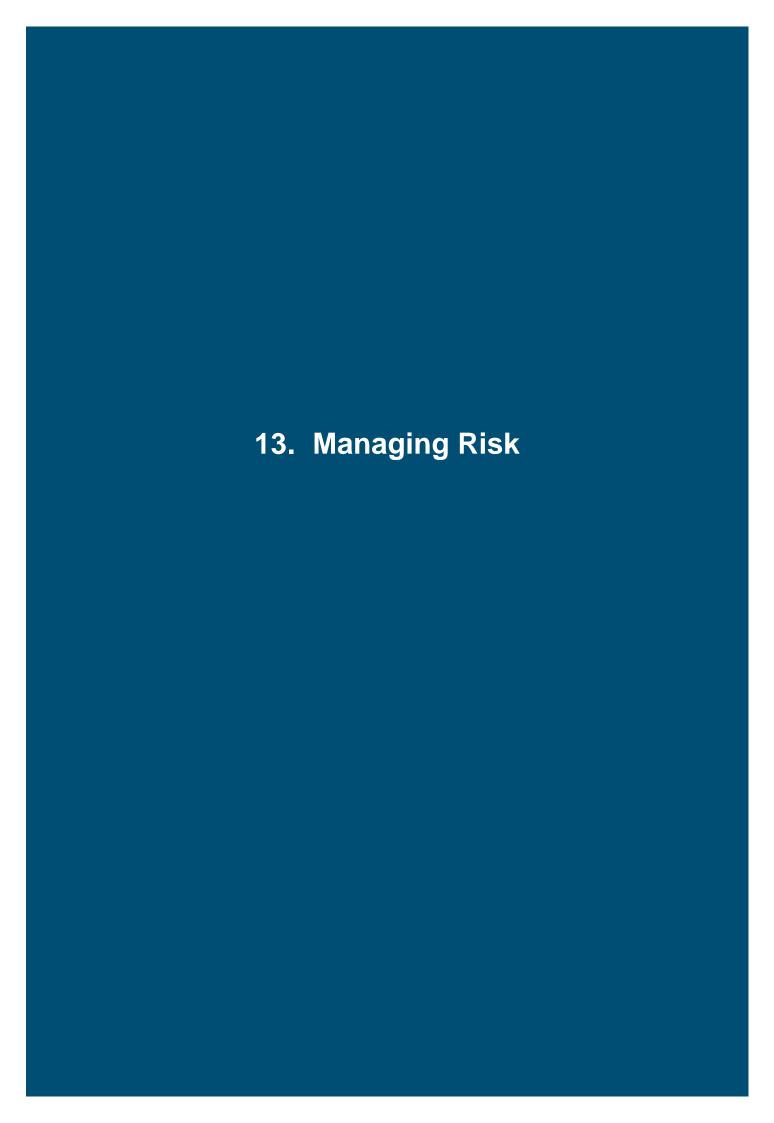
To provide an indication of the approximate movement from prices applying in the current regulatory period, the following table compares the indicative average price per reserved ML that will apply for the 2024-25 financial year for each pricing zone and the proposed indicative average price to apply from 1 July 2025 (excluding the new pricing zones). To enable comparability in real dollar terms, the 2024-25 prices have been escalated by a forecast CPI of 3.2% to bring them into 2025-26 dollar terms. 132

GAWB has applied the forecast CPI for 2024-25 based on the methodology set out in Chapter 7 and as provided by Frontier (refer Attachment 2).

Table 12.3 Indicative Average Price Movements – Current and Proposed from 1 July 2025 (\$/reserved ML)

Pricing Zone	Current Average Price (\$2026)	Proposed Indicative Average Price from 1 July 2025 (\$2026)	% Change
Awoonga	527.22	748.08	42%
Awoonga to Toolooa	1,005.71	1,296.02	29%
Toolooa to Fitzsimmons	1,098.58	1,408.39	28%
Boyne Raw	1,312.59	2,505.98	91%
Central Raw	1,204.54	1,539.77	28%
Fitzsimmons to Gladstone	1,127.82	1,446.09	28%
QAL	1,225.62	1,597.28	30%
Fisherman's Landing Raw	1,626.11	2,101.33	29%
Gladstone WTP	2,289.25	2,818.96	23%
Gladstone City	2,439.23	2,985.16	22%
Gladstone WTP to South Gladstone	2,565.82	3,170.16	24%
Calliope	3,207.29	3,969.95	24%
South Gladstone to Toolooa	3,006.16	3,615.15	20%
Boyne Potable	3,410.28	4,449.17	30%
Benaraby	4,624.75	5,673.22	23%
Yarwun WTP	3,481.47	3,884.71	12%
North Industrial Potable	4,302.31	5,041.86	17%
Fisherman's Landing Potable	7,682.19	9,369.82	22%
Boat Creek to East End	13,707.99	22,284.28	63%

^{1.} Prices movements are exclusive of the prices applicable to the Curtis Island Pricing Zone and any new pricing zone added since the 2020 Price Monitoring Investigation.



This submission has highlighted the uncertainties facing GAWB as it enters the next regulatory period, along with several changes in its operating environment. In light of these changes, GAWB is proposing the retention of its current hybrid revenue cap form of regulation, however reducing the width of the deadband from plus or minus 10% to plus or minus 5% of ARR.

- This acknowledges the significant increase in its revenue at risk based on its forecast ARR for the FY2026-30 regulatory period, which would be more than double based on a 10% deadband between 2024-25 and 2029-30.
- Rather than reduce GAWB's exposure to demand risk in ARR terms, GAWB's proposal to halve the deadband would maintain a similar level of exposure to the current FY2021-25 regulatory period.
- GAWB considers this appropriately balances mitigating customer price impacts with its ability to mitigate its financial risks.

GAWB has not proposed any amendments to the review triggers from the 2020 Price Review. However, and in response to comments made by the QCA in its 2020 Final Report, GAWB has proposed a set of qualitative assessment criteria that it would need to satisfy, which would also replace the existing materiality threshold. It has also set out the steps that would apply if a review is invoked.

As described in Chapter 3, GAWB's business and operating environment is characterised by considerable risk and uncertainty, presenting opportunities and challenges for the business. While there is always a degree of uncertainty underpinning demand and cost forecasts, even for a business operating in a more 'steady state' environment, this uncertainty is especially pronounced for GAWB as it enters the 2025 Price Monitoring Investigation. This heightened level of risk and uncertainty will extend into the FY2026-30 regulatory period.

Consideration therefore needs to be given to mechanisms within the regulatory framework that would assist GAWB to manage some of these risks. This is addressed below.

13.1 Form of Regulation

13.1.1 Current Mechanism

The key regulatory mechanism that is used to manage the business's exposure to demand risk is the form of regulation. This mechanism determines the extent to which the business bears the risk of actual demand varying from the forecast that is used to set revenue and prices at the start of the regulatory period. This only applies to demand risk borne within the regulatory period. At the end of each regulatory period the business is fully exposed to demand risk as a new forecast will be determined to set revenue and prices for the following period, reflecting the circumstances and outlook prevailing at the time. The form of regulation does not address cost risk e.g., fluctuations in operating costs during the regulatory period.

GAWB is currently subject to a hybrid mechanism, which is a revenue cap subject to a plus or minus 10% deadband. This means that GAWB bears the first 10% of annual revenue variations relative to its ARR. If the deadband is breached in any year, an adjustment is made at the start of the next regulatory period but only for the amount of additional, or foregone, revenue beyond the 10% deadband. This can result in:

- a portion of the foregone revenue being recovered from customers; or
- a portion of the additional revenue being returned to customers.

The QCA has stated that: 133

This mechanism seeks to keep GAWB's revenue from customers within a range that supports its financial viability whilst providing greater incentives to generate efficiencies than is the case with a revenue cap.

GAWB expressed concerns with the width of the deadband in its submission to the 2020 Price Monitoring Investigation, although did not propose a change.¹³⁴ As part of this GAWB questioned the extent to which exposure to demand risk is necessary to incentivise it to increase volume from water sales. In its 2020 Final Report the QCA said that:¹³⁵

We acknowledge GAWB has very little influence over the entry and exit of customers, as both domestic and international factors affect demand, and the costs imposed by GAWB are a small proportion of customers' production costs. Exogenous domestic factors include environmental considerations, and changes in technologies.

It concluded that the principal objective of the current arrangement is to "...minimise price shocks on customers, rather than to explicitly incentivise GAWB to secure additional sales volumes." ¹³⁶

13.1.2 GAWB's Proposal

For the reasons outlined previously, GAWB is facing a different risk profile compared to previous regulatory periods. At the same time, it recognises the material price increases that would be required to enable it to fully recover its efficient costs over the FY2026-30 regulatory period. This reflects the material step-up in revenue that GAWB requires to recover its efficient costs, including investments that will be recovered over long economic lives. This also increases GAWB's revenue at risk.

The following figure shows 10% of the ARR for the current regulatory period (escalated for actual inflation) and GAWB's forecast ARR as set out in Chapter 11. That is, this is the minimum change in revenue (between actual revenue and the smoothed ARR) required to trigger the hybrid revenue cap. GAWB's ARR for the FY2021-25 regulatory period, represented by the blue bars, has been adjusted for actual inflation to 2023-24. Forecast ARR for the FY2026-30 regulatory period is shown by the green bars.

¹³³ Queensland Competition Authority (2020). p.99.

Gladstone Area Water Board (2019). Bulk Water Price Review, GAWB Submission 2021-25 Period, Part A, Chapter 6.

¹³⁵ Queensland Competition Authority (2020). p.100.

¹³⁶ Queensland Competition Authority (2020). p.101.

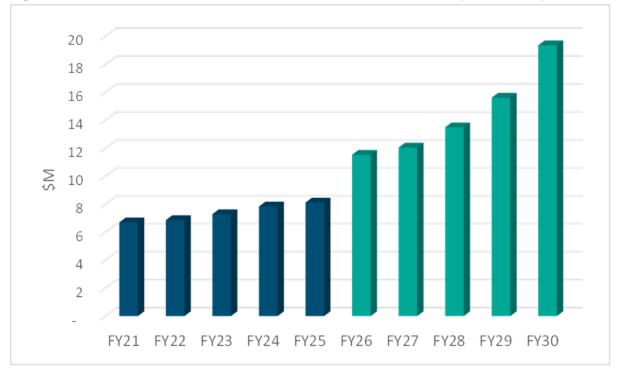


Figure 13.1 10% of GAWB's ARR – FY2021-25 and Forecast FY2026-30 (\$M, nominal)

Even in the current regulatory period, GAWB's revenue at risk is just over \$8 million in 2024-25. In other words, it would need to under- or over-recover just over \$8 million in revenue before the hybrid revenue cap can be triggered. This jumps up to around \$11.5 million in 2025-26, increasing to \$19.3 million in 2029-30.

GAWB recognises the balance between managing its financial risks and mitigating price shocks to customers. While it is willing to retain some exposure to demand risk, it considers that narrowing the deadband to plus or minus 5% of its ARR maintains an appropriate balance. Having regard to the forecast increase in revenue over the FY2026-30 regulatory period, the dollar impact of this is shown in Figure 13.2. This shows GAWB's revenue at risk:

- in the current FY2021-25 regulatory period, based on 10% of ARR (represented by the blue bars);
- in the FY2026-30 regulatory period, assuming the deadband is reduced to 5% of (forecast) ARR (represented by the green bars).



Figure 13.2: Impact of Changing the Deadband to 5% of ARR (\$M, nominal)

This shows that halving the deadband to 5% of ARR would result in a similar profile in terms of GAWB's revenue at risk over the FY2026-30 regulatory period (based on current forecast revenue). The average ARR at risk in the current period with a 10% deadband is \$7.36 million. If the deadband was reduced to 5% in the FY2026-30 regulatory period, the average revenue at risk is similar, being \$7.20 million. Even at a reduce 5% deadband, GAWB maintains that this annual level of at-risk revenue is substantive and not insignificant with regards to its financial sustainability.

As the QCA noted in its 2020 Final Report, any impact on GAWB's incentives to increase water sales is not a primary objective. In any case, it has acknowledged that GAWB's ability to influence this is limited. GAWB's ability to increase water sales is currently capped by its available water allocation at Awoonga Dam, which is now fully allocated (refer Chapter 12). With a small and concentrated customer base, GAWB has always had a strong incentive to increase sales within its available allocation, including to further diversify its exposure across businesses and industries.

This proposal also assumes that GAWB's current tariff structure is maintained pending a more comprehensive review during the FY2026-30 regulatory period (refer Chapter 12). Any recommendation to alter the existing tariff structure that would have the effect of increasing the variable 'at risk' component of GAWB's revenue under its commercial contracts could exacerbate its exposure to demand risk and adversely impact its financial sustainability. This may necessitate a further review of its form of regulation.

If the current 10% deadband is maintained, GAWB's revenue at risk is forecast to more than double between 2024-25 and 2029-30. For the FY2026-30 regulatory period, GAWB therefore proposes to retain its current hybrid form of regulation, with a lower deadband of plus or minus 5% of its ARR. This is considered reasonable as it effectively maintains a similar exposure to demand risk in dollar terms, which also means that it is not increasing the risk borne by customers.

13.2 Review Triggers

13.2.1 Current Review Triggers

Review trigger events are intended to reflect unanticipated and material changes in assumptions or circumstances impacting GAWB's costs and/or revenue that are not reflected in the approved forecasts for the relevant regulatory period.

For the current FY2021-25 regulatory period, the QCA endorsed two review trigger events, being a force majeure event and drought response measures. Both events are subject to QCA approval and a materiality threshold of 15% of smoothed ARR over the five-year period applies.

In practice, this is a very high bar for the mechanism to be triggered. Based on GAWB's average annual proposed ARR for the FY2021-25 regulatory period, a 15% threshold would equate to an increase in revenue above \$11 million in a year. This increases to \$29 million based on forecast ARR in 2029-30.

In the 2020 Price Monitoring Investigation, the QCA disagreed with a proposal by GAWB to reduce this threshold to 10%, aligning with the form of regulation. It concluded that:¹³⁷

...our preferred approach would be for GAWB to eliminate a numerical threshold and instead propose a qualitative assessment process in the case of a trigger event, involving specific steps and criteria to deal with the trigger event in an efficient manner. Should these criteria be satisfied, we find GAWB should be eligible for a mid-period review.

13.2.2 GAWB's Proposal

Review Trigger Events

GAWB's key risks as it enters the FY2026-30 regulatory period mainly relate to uncertainties in forecasting costs. These include, but are not limited to, further acceleration of hydrogen development (in timing and/or scale) beyond the assumptions reflected in GAWB's forecast, along with other activities and investments that will support current and future demand in the Gladstone region. However, it is not clear that these risks would be accommodated under the existing review trigger mechanism. GAWB is therefore not proposing any changes or additions to the two existing review trigger events at this point in time.

Qualitative Assessment Process

Criteria

In terms of what should potentially trigger a review event, GAWB agrees with the QCA that a qualitative assessment process, based on specified criteria, would be more appropriate than a materiality threshold. This will also provide GAWB and customers with more certainty as to how a review trigger may be applied, as well as how it might be assessed by the QCA.

¹³⁷ Queensland Competition Authority (2020). p.107.

In this regard, GAWB proposes that it would need to demonstrate the following:

- The extent to which the trigger arises from:
 - an event that was not reasonably foreseeable at the time of developing GAWB's expenditure forecasts; or
 - a change in circumstances and/or costs that could not have been predicted at the time of developing GAWB's expenditure forecasts.
- It has taken reasonable actions to mitigate the risk of the event and/or the impacts of the event on the business.
- The costs are sufficiently material that the costs could not reasonably be met by an
 efficient entity operating within business-as-usual budget constraints, through prudent
 prioritisation of expenditures, or be otherwise mitigated.
- The costs have been prudently and efficiently incurred.

Process

The initial question is the role of the QCA in assessing review triggers within the current price monitoring framework. As outlined previously, the QCA's role in the price monitoring investigation is to present findings (including indicative prices) that have "an informative rather than deterministic purpose." Ultimately, GAWB's Board is responsible for setting prices and any updates to prices during the regulatory period are governed by the terms of its commercial arrangements with customers.

The Referral Notice does not provide any specific directions to the QCA in relation to any price assessments, such as a review trigger, that may occur during the regulatory period. In the absence of this clarity, GAWB assumes the steps involved would be similar to a price monitoring investigation, while reflecting the very limited scope of a review trigger event.

It is assumed that the process would commence with GAWB lodging a submission to the QCA, which the QCA would then publish on its website for public consultation. As appropriate, GAWB will also look to engage with customers prior to lodging its submission.

It is proposed that rather than issue a Draft Report for further consultation, the QCA would only publish a Final Report. This will reduce the time and costs of such a review for all relevant stakeholders. However, in the absence of a Draft Report, GAWB would anticipate that it would have the opportunity to address key concerns directly with the QCA. The nature and outcomes of this engagement would be included in the Final Report to retain transparency.

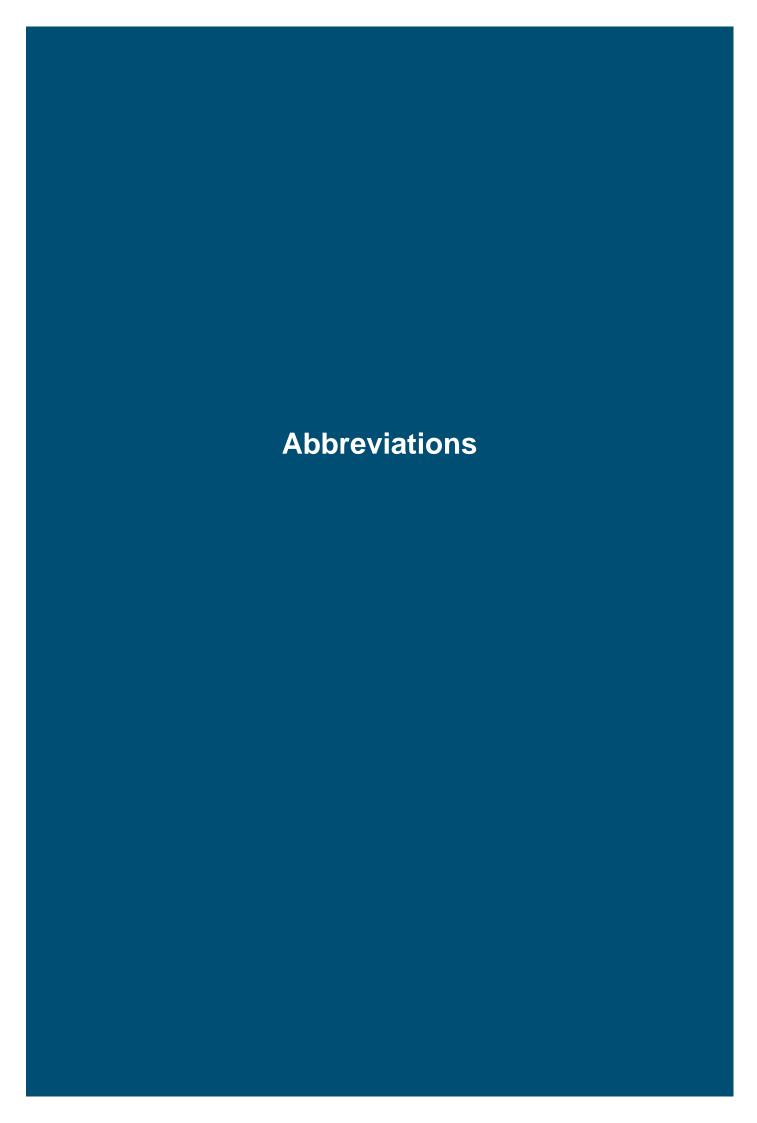
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¹³⁸ Queensland Competition Authority (2020). p.5.

In summary, the steps would involve:

- 1. GAWB's lodgement of a submission with the QCA on the review trigger event, addressing the qualitative criteria and specifying how it proposes to address this in prices.
- 2. The QCA publishing GAWB's submission on its website and inviting submissions.
- 3. If required, the QCA and GAWB would consult on any key relevant issues prior to the QCA finalising its assessment.
- 4. The QCA publishing a Final Report, presenting its findings on GAWB's proposal.

GAWB is happy to discuss any aspects of this assessment process with the QCA with a view to developing a workable process that meets the QCA's expectations.



AASB	Australian Accounting Standards Board
ABS	Australian Bureau of Statistics
ADA	Aquaculture Development Area
AER	Australian Energy Regulator
AFC	Acceptable Flood Capacity
ANCOLD	Australian National Committee on Large Dams
ADA	Aquaculture Development Area
ARR	Annual Revenue Requirement
ASX	Australian Stock Exchange
BCDF	Queensland Government's Business Case Development Framework
CAPM	Capital Asset Pricing Model
CCF	Community Consultative Forum
CGS	Commonwealth Government Securities
COVID-19	Pandemic of coronavirus disease 2019
CPI	Consumer Price Index
CPF	Capacity Preservation Fee
CSS	Contingent Supply Strategy
Deloitte	Deloitte Access Economics
DMP	Drought Management Plan
DRDMW	Department of Regional Development, Manufacturing and Water
DWQMP	Drinking Water Quality Management Plan
EDQ	Economic Development Queensland
EIS	Environmental Impact Statement
Energex	Energex Corporation Limited
Ergon Network	Ergon Energy Network Corporation Ltd
Ergon Retail	Ergon Energy Queensland Pty Ltd
ERP	Enterprise Resource Planning
FEED	Front End Engineering Design
FGP	Fitzroy to Gladstone Pipeline
Frontier	Frontier Economics Pty Ltd
FTE	Full-time equivalent
FY	Financial year
GAWB	Gladstone Area Water Board
GL	Gigalitre
GPCL	Gladstone Ports Corporation Ltd
GRC	Gladstone Regional Council
GSDA	Gladstone State Development Area
ICT	Information and Communications Technologies
IDC	Interest during construction
IPART	Independent Pricing and Regulatory Tribunal
ISR	Industrial Special Risk

LCMP	Lifecycle Maintenance Plan
LNG	Liquified natural gas
LRMC	Long-run marginal cost
LSA	Low Supply Alert
M	Million
Marsh	Marsh Pty Limited
MDQ	Maximum daily quantity
ML	Megalitre
MRP	Market risk premium
NEM	National Electricity Market
NIZ	Northern Industrial Zone
NPR	National Performance Review
NPR	National Performance Review
ОТ	Operational technology
PAC	Powder activated carbon
PMF	Project Management Framework
PoE	Probability of Exceedance
PPI	Producer Price Index
PV	Photovoltaic
QCA	Queensland Competition Authority
QCA Act	Queensland Competition Authority Act 1997 (Qld)
QTC	Queensland Treasury Corporation
RAB	Regulated Asset Base
RBA	Reserve Bank of Australia
SCADA	Supervisory Control and Data Acquisition
Seqwater	Queensland Bulk Water Supply Authority
SOCI	Security of Critical Infrastructure
Sunwater	Sunwater Ltd
Synergies	Synergies Economic Consulting Ltd
WACC	Weighted Average Cost of Capital
Water Act	Water Act 2000 (Qld)
Water Supply Act	Water Supply (Safety and Reliability) Act 2008 (Qld)
WPI	Wage Price Index